

**BEFORE THE  
PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA**

**DOCKET NO. 2019-3-E**

In the Matter of	)	
Annual Review of Base Rates	)	
for Fuel Costs for	)	<b>DIRECT TESTIMONY OF</b>
Duke Energy Carolinas, LLC, Increasing	)	<b>KIMBERLY D. MCGEE FOR DUKE</b>
Residential and Non-Residential Rates	)	<b>ENERGY CAROLINAS, LLC</b>

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1    **Q.    PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A.    My name is Kimberly D. McGee, and my business address is 550 South Tryon  
3        Street, Charlotte, North Carolina.

4    **Q.    BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5    A.    I am a Rates Manager supporting both Duke Energy Carolinas, LLC (“DEC” or the  
6        “Company”) and Duke Energy Progress, LLC (“DEP”) (collectively, the  
7        “Companies”).

8    **Q.    PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**  
9        **PROFESSIONAL EXPERIENCE.**

10   A.   I graduated from the University of North Carolina at Charlotte with a Bachelor of  
11        Science degree in Accountancy. I am a certified public accountant licensed in the  
12        State of North Carolina. I began my career in 1989 with Deloitte and Touche, LLP  
13        as a staff auditor. In 1992, I began working with DEC (formerly known as Duke  
14        Power Company) as a staff accountant and have held a variety of positions in the  
15        finance organization. From 1997 until 2009, I worked for Wachovia Bank (now  
16        known as Wells Fargo) in a variety of finance and regulatory positions. I rejoined  
17        DEC in January 2009 as a Lead Accountant in Financial Reporting. I joined the  
18        Rates Department in 2011 as Manager, Rates and Regulatory Filings.

19   **Q.    HAVE YOU TESTIFIED BEFORE THIS COMMISSION IN ANY PRIOR**  
20        **PROCEEDINGS?**

21   A.   Yes. I testified before the Public Service Commission of South Carolina (“PSCSC”  
22        or “Commission”) in DEC’s 2018 and 2017 annual fuel and environmental cost  
23        recovery proceeding in Dockets 2018-3-E and 2017-3-E.

1     **Q.     WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

2     A.     The purpose of my testimony is to provide DEC's actual fuel, capacity related costs  
3           including Public Utility Regulatory Policies Act of 1978 ("PURPA") capacity,  
4           environmental, and Distributed Energy Resource Program ("DERP") cost data for  
5           June 1, 2018 through May 31, 2019 (the "review period"), the projected fuel,  
6           capacity related costs, environmental and DERP cost information for June 1, 2019  
7           through September 30, 2019 (the "forecast period"), and DEC's proposed fuel  
8           factors by customer class for October 1, 2019 through September 30, 2020 (the  
9           "billing period"). I am providing thirteen exhibits to support my testimony.

10    **Q.     WHAT IS THE SOURCE OF THE ACTUAL INFORMATION AND DATA**  
11       **FOR THE REVIEW PERIOD?**

12    A.     Actual test period kilowatt hour ("kWh") generation, kWh sales, fuel-related  
13           revenues, fuel-related expenses, and DERP revenues and expenses were taken from  
14           DEC's books and records. These books, records, and reports of DEC are subject to  
15           review by the appropriate regulatory agencies in the three jurisdictions that regulate  
16           DEC's electric rates.

17           In addition, independent auditors perform an annual audit to provide  
18           assurance that, in all material respects, internal accounting controls are operating  
19           effectively and DEC's financial statements are accurate.

20    **Q.     DOES DEC PURCHASE POWER AND HOW ARE THESE COSTS**  
21       **RECORDED?**

22    A.     Yes. The Company continuously evaluates purchasing power if it can be reliably  
23           procured and delivered at a price that is less than the variable cost of DEC's

1 generation. In accordance with S.C. Code Ann. § 58-27-865(A), DEC recovers  
2 from its South Carolina retail customers an amount that is the lower of the purchase  
3 price or DEC's avoided variable cost for generating an equivalent amount of power  
4 for its economy purchases. The Company also engages in economy purchases (and  
5 economy sales) with DEP as a result of the Joint Dispatch Agreement.

6 The Company also purchases power from certain suppliers that are treated  
7 as firm generation capacity purchases. In accordance with S.C. Code Ann. § 58-  
8 27-865(A)(2)(a), all amounts paid to these suppliers are recorded as recoverable  
9 fuel costs with the exception of capacity charges.

10 Finally, the Company routinely purchases power from qualifying facilities  
11 under PURPA. According to Act 236, set forth in S.C. Code Ann. § 58-27-865(A),  
12 the avoided cost payments for such purchases are included in fuel costs recoverable  
13 from South Carolina retail customers

14 **Q. PLEASE EXPLAIN MCGEE EXHIBIT NO. 1.**

15 A. McGee Exhibit No. 1 is a summary of DEC's recommended fuel rate components  
16 for the billing period. The components are: (1) base fuel costs , (2) capacity-related  
17 costs, (3) DERP avoided costs, (4) variable environmental costs, and (5) DERP  
18 incremental costs. These fuel rate components are supported by McGee Exhibit  
19 Nos. 2 through 13 and individually discussed further in my testimony.

20 The following table shows the rates and monthly charges proposed by the  
21 Company in this proceeding as reflected in McGee Exhibit No. 1. The DERP  
22 incremental cost component is computed as a dollar amount per customer account

since these amounts are subject to per-account cost caps established by Act 236.

All other fuel components are computed as a rate per kWh.

			Customer Class		
			Cents / kWh		
			General /		
Line No.	Description	Reference	Residential	Lighting	Industrial
Base Fuel Costs					
1	Base Fuel Cost Component Under / (Over) at September 2019	Exhibit 2 Page 2	0.3606	0.3606	0.3606
2	Base Fuel Cost Component Projected Billing Period	Exhibit 3	1.7541	1.7541	1.7541
3	Total Base Fuel Cost Component		2.1146	2.1146	2.1146
Capacity Related Costs					
			Cents / kWh		
4	PURPA Purchased Power Component Under / (Over) at September 2019	Exhibit 6 Page 1, 2, 3	(0.0197)	(0.0403)	(0.0333)
5	Capacity Related Cost Component Projected Billing Period	Exhibit 7	0.1983	0.1039	0.0705
6	Total Capacity Related Cost Component	Line 4 + 5	0.1786	0.0636	0.0372
Distributed Energy Resource Program Avoided Costs					
			Cents / kWh		
7	DERP Avoided Costs Component Under / (Over) at September 2019	Exhibit 12 Page 1,2,3	0.0001	(0.0001)	(0.0002)
8	DERP Avoided Costs Component Projected Billing Period	Exhibit 13	0.0025	0.0013	0.0009
9	Total DERP Avoided Costs Component	Line 7 + 8	0.0026	0.0012	0.0007
Environmental Costs					
			Cents / kWh		
10	Environmental Component Under / (Over) at September 2019	Exhibit 4 Page 1, 2, 3	0.0096	(0.0017)	(0.0022)
11	Environmental Component Projected Billing Period	Exhibit 5	0.0507	0.0266	0.0180
12	Total Environmental Component	Line 10 + 11	0.0603	0.0249	0.0158
13	Total Fuel Billing Factors	Sum Line 3 + Line 6 + Line 9 + Line 12	2.3561	2.2043	2.1683
Distributed Energy Resource Program Incremental Cost per Account					
			Residential	General Service	Industrial
DERP Incremental Under / (Over) at September 2019					
14	Annual Charge / (Credit)	Exhibit 9	\$ (1.51)	\$ (4.76)	\$ (230.32)
15	Monthly Charge / (Credit)	Exhibit 9	\$ (0.13)	\$ (0.40)	\$ (19.19)
DERP Incremental Projected Billing Period					
16	Annual Charge	Exhibit 11	\$ 8.92	\$ 28.19	\$ 1,363.57
17	Monthly Charge	Exhibit 11	\$ 0.74	\$ 2.35	\$ 113.63
18	Total DERP Annual Charge - excluding GRT	Line 14 + Line 16	\$ 7.41	\$ 23.44	\$ 1,133.25
19	Total DERP Monthly Charge - excluding GRT	Line 15 + Line 17	\$ 0.62	\$ 1.95	\$ 94.44
20	Total DERP Annual Charge per account CAP		\$ 12.00	\$ 120.00	\$ 1,200.00
21	Total DERP Annual Charge - including GRT	Line 18 / (1-Tax Rate)	\$ 7.45	\$ 23.56	\$ 1,138.93
22	Total DERP Monthly Charge - including GRT	Line 19 / (1-Tax Rate)	\$ 0.62	\$ 1.96	\$ 94.91
Totals may not sum due to rounding					

Act 236 requires that capacity costs be tracked separately, allocated and recovered among customer classes using the same method that is used to allocate

1 and recover variable environmental costs. Act 236 also requires that the incremental  
2 costs and avoided cost of DERP be tracked separately, allocated and recovered  
3 among customer classes using the same method that is used to allocate variable  
4 environmental costs.

5 In addition, McGee Exhibit No. 1 includes the projected per-account charge  
6 per month of \$0.62, \$1.96 and \$94.91, including Gross Receipts Tax (“GRT”), for  
7 South Carolina residential, general service, and industrial customers, respectively.  
8 The monthly DERP incremental per-account charge recovers 100% of the DERP  
9 incremental costs, in accordance with S.C. Code Ann. § 58-27-865(A)(1).

10 **Q. HOW DID DEC’S FUEL REVENUE BILLINGS COMPARE TO THE FUEL**  
11 **COSTS INCURRED DURING THE JUNE 2018 – MAY 2019 TIME**  
12 **PERIOD?**

13 A. McGee Exhibit No. 2 is a monthly comparison of fuel revenues collected from  
14 South Carolina retail customers to the actual and estimated jurisdictional fuel costs  
15 attributable to those sales. The Company currently projects that its deferred base  
16 fuel cost balance will be an under-collection of approximately \$78.9 million at  
17 September 30, 2019. This includes approximately \$544,982 of interest calculated  
18 on the 2018 deferral of \$34 million of costs approved by the Commission in Docket  
19 No. 2018-3-E as stipulated to in that proceeding.<sup>1</sup>

20 **Q. PLEASE EXPLAIN MCGEE EXHIBIT NO. 3.**

21 A. McGee Exhibit No. 3 presents DEC’s proposed base fuel rate of 1.7541¢/kWh for  
22 the billing period to recover South Carolina’s retail share of \$1.6 billion of

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<sup>1</sup> See Stipulation at P 5, Docket No. 2018-3-E (filed Sept. 10, 2018).

1 projected system fuel expense. The South Carolina retail share of approximately  
2 \$384 million incorporates net metering avoided fuel benefits assigned fully to SC  
3 retail customers.

4 The fuel forecast supporting the projected fuel cost was generated by an  
5 hourly dispatch model that considers the latest forecasted fuel prices, outages at the  
6 generating plants based on planned maintenance and refueling schedules, forced  
7 outages based on historical trends, generating unit performance parameters, and  
8 expected market conditions associated with power purchase and off-system sales  
9 opportunities. In addition, the forecasting model reflects the joint dispatch of the  
10 combined power supply resources of the Companies.

11 **Q. PLEASE PROVIDE A STATUS UPDATE OF ENVIRONMENTAL COST**  
12 **COLLECTION.**

13 A. During the review period, DEC recovered variable environmental costs and the  
14 costs of emission allowances through the environmental component of the fuel rate.  
15 Environmental costs allocated to the South Carolina retail jurisdiction during the  
16 review period were approximately \$5.7 million, as shown by month on McGee  
17 Exhibit No. 4. The Company currently estimates that its deferred environmental  
18 cost balance will be an under-collection of \$346,747 at September 30, 2019.

19 **Q. HAVE YOU PROVIDED A FORECAST OF ENVIRONMENTAL COSTS?**

20 A. Yes, McGee Exhibit No. 5 presents DEC's estimated system environmental costs  
21 for the billing period of \$27.1 million. The South Carolina retail portion is  
22 projected to be approximately \$6.7 million.

1 **Q. PLEASE DESCRIBE EMISSION-REDUCING CHEMICALS THAT DEC**  
2 **INCLUDED IN THE PROPOSED FUEL RATE IN THIS FILING.**

3 A. As Company witness Immel explains more specifically in his testimony, DEC uses  
4 emission-reducing chemicals at its fossil/hydro plants to help it provide low cost,  
5 reliable electric generation for its customers while also complying with state and  
6 federal environmental control obligations. As a result, DEC has included the cost  
7 of magnesium hydroxide, calcium carbonate, ammonia, trona, urea, quicklime,  
8 limestone, lime and hydrated lime incurred during the review period in its fuel cost  
9 recovery application. Mercury and Air Toxics Standards (“MATS”) chemicals that  
10 DEC may use in the future to reduce emissions include, but may not be limited to,  
11 activated carbon, mercury oxidation chemicals, and mercury re-emission  
12 prevention chemicals.

13 **Q. HOW DID DEC ALLOCATE ENVIRONMENTAL COSTS?**

14 A. DEC allocated the South Carolina retail portion of environmental cost to  
15 Residential, General Service/Lighting, and Industrial customer classes based upon  
16 the firm coincident peak demand of each class for the prior year. The 2017 firm  
17 coincident peak demand was used to allocate costs for the period June 2018 –  
18 December 2018 and the 2018 firm coincident peak demand was used to allocate  
19 costs for the period January 2019 – September 2020. This allocation is shown on  
20 McGee Exhibit Nos. 4 and 5.

21 **Q. PLEASE PROVIDE A STATUS UPDATE OF CAPACITY-**  
22 **RELATED COSTS COLLECTION.**



1     **A.**     During the review period, DEC recovered capacity related costs, including PURPA  
2             purchased power capacity costs and natural gas transportation (pipeline  
3             reservation/lease costs) and storage costs through the capacity-related component  
4             of the fuel rate. Capacity related costs allocated to the South Carolina retail  
5             jurisdiction during the review period were approximately \$16.4 million, as shown  
6             on McGee Exhibit No. 6. The Company currently estimates that its cumulative  
7             capacity related cost balance will be an (over)-recovery of \$(6.8) million at  
8             September 30, 2019.

9     **Q.     HAVE YOU PROVIDED A FORECAST OF CAPACITY-RELATED**  
10            **COSTS?**

11    **A.**     Yes. McGee Exhibit No. 7 presents DEC's projected system capacity-related costs,  
12             including PURPA purchased power capacity costs, natural gas transportation  
13             (pipeline reservation/ lease costs) and natural gas storage costs, for the billing  
14             period of \$105.6 million. The South Carolina retail portion is forecasted to be  
15             approximately \$26.0 million.

16    **Q.     HOW DID DEC ALLOCATE CAPACITY RELATED COSTS?**

17    **A.**     DEC allocated the South Carolina retail portion of capacity-related costs to  
18             Residential, General Service/Lighting, and Industrial customer classes based upon  
19             the firm coincident peak demand of each class for the prior year. The 2017 firm  
20             coincident peak demand was used to allocate costs for the period June 2018 -  
21             December 2018 and the 2018 firm coincident peak demand was used to allocate  
22             costs for the period January 2019 – September 2020. This allocation is shown on  
23             McGee Exhibit Nos. 6 and 7.

1   **Q.    WHAT DERP INCREMENTAL COSTS ARE INCLUDED IN THIS FUEL**  
2   **FILING?**

3   A.    S.C. Code Ann. § 58-39-140 defines “incremental costs” as all reasonable and  
4       prudent costs incurred by an electrical utility to implement a distributed energy  
5       resource program. This filing includes the following categories of incremental  
6       costs:

- 7       •       Costs associated with purchase power agreements (“PPA”) in excess of the  
8               Company’s avoided cost rate;
- 9       •       The DERP net energy metering (“NEM”) Incentive, which is a credit  
10              available to eligible NEM customer-generators, approved in Docket No.  
11              2014-246-E;
- 12       •       Amortization of solar rebates given to South Carolinas residential and non-  
13              residential customers to invest in or lease distributed generation;
- 14       •       Carrying costs on unamortized solar rebate balances;
- 15       •       An incentive utilized to lower the subscription charge customers pay to  
16              participate in the Shared Solar program;
- 17       •       Avoided capacity costs and administrative costs associated with NEM,  
18              recoverable as an incremental cost based on Section 58-40-20(F)(6);
- 19       •       General and administrative costs, which include the cost of developing and  
20              implementing programs, incremental labor, and additional revenue-grade  
21              meters; and
- 22       •       Carrying costs on under-collected balances due to per-account cost caps.

1   **Q.   PLEASE PROVIDE A STATUS UPDATE OF DERP INCREMENTAL**  
2       **COSTS COLLECTION.**

3   **A.**   During the review period, DEC recovered DERP incremental costs, offset by any  
4       revenues collected from program participants, through the DERP incremental cost  
5       per account charge. Review period DERP incremental costs were approximately  
6       \$8.8 million, as shown on McGee Exhibit No. 8. The cumulative DERP incremental  
7       cost balance will be an (over)-collection balance of \$(474,257) at May 31, 2019.  
8       The Company currently estimates that the cumulative DERP incremental cost  
9       balance will be an (over)-collection balance of approximately \$(1.5) million at  
10      September 30, 2019.

11   **Q.   ARE THERE ANY ITEMS APPROVED IN THE DEC SC BASE RATE**  
12       **CASE, ORDER NO. 2019-323, DOCKET NO. 2018-319-E, THAT COULD**  
13       **IMPACT DERP COSTS AND ASSOCIATED REVENUES INCLUDED IN**  
14       **THIS FUEL FILING?**

15   **A.**   Yes. The Commission approved the Company using the unamortized SC DERP  
16       rebate balance at September 30, 2018 of \$40.1 million to offset excess deferred  
17       income taxes approved in the associated EDIT rider. Removal of this balance  
18       resulted in lowering the per account charge.

19   **Q.   DID THE COMPANY INCLUDE IMPACTS OF THE RECENTLY**  
20       **ENACTED HOUSE BILL 3659 (ACT 62) INTO THE DERP**  
21       **PROJECTIONS?**

22   **A.**   Yes. Originally, Act 236 set limits on the amount of net metering that the Company  
23       could offer to customers. With the enactment of Act 62, there is no longer a cap on

1 the amount of net metering allowed in South Carolina. As described in Company  
2 witness Martin's testimony, the projections reflect the increase in net metering  
3 generation as well as an increase in the net metering incentive included in the  
4 incremental DERP charges shown in McGee Exhibit No. 10.

5 **Q. HOW DID DEC ALLOCATE DERP INCREMENTAL COSTS?**

6 **A.** DEC allocated 100% of DERP incremental costs to South Carolina residential,  
7 Commercial (General Service/Lighting), and Industrial customer classes based  
8 upon the firm coincident peak demand of each class for the prior year. The 2017  
9 firm coincident peak demand was used to allocate costs for the period June 2018 –  
10 December 2018 and the 2018 firm coincident peak demand was used to allocate  
11 costs for the period January 2019 – May 2019. This allocation is shown on McGee  
12 Exhibit No. 9.

13 One exception to this approach is the allocation of the avoided capacity  
14 costs associated with NEM that is included in the DERP incremental costs. This  
15 particular incremental cost has been allocated to the South Carolina retail  
16 jurisdiction based on its pro rata share of system peak demand, rather than 100%.  
17 This DERP incremental cost is related to system generation supply resources. Costs  
18 and benefits allocated with the system generation supply resources are traditionally  
19 allocated among all of the Company's rate jurisdictions since such generation  
20 supply resources are operated as a portfolio to serve its native load customers in all  
21 rate jurisdictions.

22 **Q. PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 9.**

1     **A.**     McGee Exhibit No. 9 establishes the monthly charges by customer class for  
2             incremental DERP (over)/under recovery. Each class's allocated portion of the  
3             cumulative Incremental (over)/under recovery balance was divided by the projected  
4             number of accounts subject to the DERP per-account charge for each class. This  
5             calculation results in an annual dollar per-account charge which is billed as a  
6             separate fixed monthly component of the fuel factor by customer class. DEC  
7             proposes the per-account monthly decrement for (over)-recovery of \$(0.13),  
8             \$(0.40) and \$(19.19) for South Carolina Residential, Commercial (General  
9             Service/Lighting) and Industrial customers, excluding GRT.

10    **Q.     PLEASE EXPLAIN WHAT IS SHOWN ON MCGEE EXHIBIT NO. 10.**

11    **A.**     McGee Exhibit No. 10 itemizes DEC's projected DERP incremental costs by cost  
12             type and month for the billing period. Total DERP incremental costs are projected  
13             to be approximately \$8.6 million.

14    **Q.     PLEASE EXPLAIN MCGEE EXHIBIT NO. 11.**

15    **A.**     McGee Exhibit No. 11 presents the calculation of the prospective per-account  
16             charge by customer class in order for DEC to recover DERP projected incremental  
17             costs. Each class's allocated portion of the total DERP projected cost balance was  
18             divided by the projected number of accounts subject to the DERP per-account  
19             charge for each class. This calculation results in an annual dollar per-account charge  
20             which is billed monthly as part of the fixed monthly component of the fuel factor  
21             by customer class. DEC has estimated per-account charges per month of \$0.74,  
22             \$2.35 and \$113.63 for South Carolina Residential, Commercial and Industrial  
23             customers, excluding GRT. Proposed rates are subject to per-account cost caps.

1 Q. **HOW DOES THE COMPANY TREAT UNDER-COLLECTED DERP**  
2 **INCREMENTAL COSTS RESULTING FROM REACHING THE PER**  
3 **ACCOUNT COST CAP?**

4 A. Consistent with Docket No. 2015-55-E, Order No. 2015-515, the Company  
5 reallocates under-collected DERP incremental costs in excess of the per-account  
6 cost caps among all customer classes with carrying costs applied at the three-year  
7 treasury rate plus 65 basis points. Interest calculated on the monthly under-collected  
8 balance is shown as a separate incremental cost on McGee Exhibit No. 8.

9 Q. **HAVE ANY CUSTOMER CLASSES REACHED THE DERP PER-**  
10 **ACCOUNT CAP IN THIS FILING?**

11 A. Yes, During the review period, the industrial customers were being billed the  
12 capped amount of \$100 per month. Interest was computed in any month that billing  
13 the capped amount resulted in the industrial customer class having an under-  
14 collection. That interest was included as an incremental cost, shown on Exhibit 8.  
15 The proposed rates in this case do not exceed the cap due to the removal of solar  
16 rebate balances resulting in lower amortization costs and associated carrying costs  
17 on those rebate balances as approved in the SC Base rate case, Order No. 2019-323,  
18 Docket No. 2018-319-E.

19 Q. **WHAT DERP AVOIDED COSTS ARE INCLUDED IN THIS FILING?**

20 A. Avoided cost generally refers to the energy and capacity cost the utility avoids when  
21 buying power from another entity rather than generating the power itself. Under  
22 PURPA, payments made to qualifying facilities for power are based on avoided  
23 cost rates. In the DERP context, S.C. Code Ann. §58-39-140(A)(1) states that

1 “avoided cost” for purposes of separating total DERP program costs between  
2 incremental and avoided costs is “all costs paid under avoided cost rates, or  
3 negotiated rates pursuant to PURPA, which ever is lower.” In S.C. Code Ann. §  
4 58-39-120(B), avoided costs are further defined, indicating that they are to be rates  
5 most recently approved by the Commission, or negotiated pursuant to PURPA. Any  
6 amounts above avoided cost or above negotiated rates pursuant to PURPA from  
7 DERP third party purchases are treated as DERP incremental costs in this filing.

8 **Q. PLEASE PROVIDE A STATUS UPDATE OF DERP AVOIDED COSTS**  
9 **COLLECTIONS.**

10 A. During the review period, DEC recovered the DERP avoided costs of third party  
11 purchases, including the portion serving the purchased power needs of the Shared  
12 Solar program, through the DERP avoided cost component of the fuel rate. As  
13 shown on McGee Exhibit No. 12, system DERP avoided costs during the review  
14 period were \$126,243, of which \$30,913 has been allocated to the South Carolina  
15 retail jurisdiction. The total South Carolina retail share was allocated to the classes  
16 as described below and was divided by projected sales to arrive at a cents per kWh  
17 rate by customer class. The Company currently estimates that its South Carolina  
18 deferred DERP avoided cost balance will be an (over)-collection of \$(18,581) at  
19 September 30, 2019.

20 **Q. HOW DID THE COMPANY ALLOCATE DERP AVOIDED COSTS?**

21 A. DEC allocated DERP avoided costs based on the same method that is used by the  
22 utility to allocate and recover variable environmental costs. As such, DEC  
23 allocated the South Carolina Retail portion of DERP avoided costs to Residential,

1 General Service/Lighting and Industrial rate classes based upon the firm coincident  
2 peak demand of each class for the prior year. The 2017 firm coincident peak  
3 demand was used to allocate costs for the period June 2018 – December 2018 and  
4 the 2018 firm coincident peak demand was used to allocate costs for the period  
5 January 2019 – September 2020. The total cost allocated to each class is divided by  
6 projected sales to arrive at a cents per kWh. This allocation is shown on McGee  
7 Exhibit No. 12 and 13.

8 **Q. HAVE YOU PROVIDED A FORECAST OF DERP AVOIDED COSTS IN**  
9 **MCGEE EXHIBIT NO. 13?**

10 A. Yes, McGee Exhibit No. 13 provides DEC's projected system DERP avoided cost  
11 for the billing period of approximately \$1.3 million. The South Carolina retail  
12 portion is projected to be \$330,558.

13 **Q. DO YOU BELIEVE DEC'S ACTUAL FUEL COSTS AND DERP COSTS**  
14 **INCURRED DURING THE PERIOD WERE REASONABLE?**

15 A. Yes. I believe the costs were reasonable and that DEC has demonstrated that it has  
16 met the criteria set forth in S.C. Code Ann. § 58-27-865. These costs also reflect  
17 DEC's continuing efforts to maintain reliable service and an economical generation  
18 mix, thereby minimizing the total cost of providing service to DEC's South  
19 Carolina retail customers. I also believe that the DERP costs were reasonable and  
20 that DEC has demonstrated that it met the criteria set forth in S.C. Code Ann. § 58-  
21 39-130(A)(2).

22 **Q. WHAT ARE THE KEY DRIVERS IMPACTING THE PROPOSED FUEL**



1           **FACTOR?**

2       A.     A number of factors contribute to the change in the proposed total fuel cost factors  
3           for all customer classes. The increase in fuel factors is primarily being driven by a  
4           higher under-collection in base fuel due primarily to the inclusion of \$34 million of  
5           costs that were deferred from the 2018 annual fuel filing proceeding. This increase  
6           is partially offset by lower fuel commodity prices projected for the billing period.

7       **Q.     INCLUDING THE DERP INCREMENTAL PER ACCOUNT CHARGES,**  
8           **WHAT IS THE IMPACT TO CUSTOMERS' BILLS IF THE PROPOSED**  
9           **FUEL COST, CAPACITY RELATED COST, DERP AVOIDED COST, AND**  
10          **ENVIRONMENTAL COST FACTORS ARE APPROVED BY THE**  
11          **COMMISSION?**

12      A.     The impact of all components of this filing to customers' monthly bills of a typical  
13           residential customer using 1000 kWh per month is an increase of \$2.21, or 1.7%. The  
14           impacts for average general service, lighting and industrial customers vary by  
15           customer, but are approximately of 0.7%, 0.6% and 1.7%, respectively.

16      **Q.     DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

17      A.     Yes, it does.

## McGee Exhibit 1

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF TOTAL FUEL BILLING FACTORS  
BILLING PERIOD OCTOBER 1, 2019 TO SEPTEMBER 30, 2020

Line No.	Description	Reference	Customer Class		
			Cents / kWh		
			Residential	General / Lighting	Industrial
<b>Base Fuel Costs</b>					
1	Base Fuel Cost Component Under / (Over) at September 2019	Exhibit 2 Page 2	0.3606	0.3606	0.3606
2	Base Fuel Cost Component Projected Billing Period	Exhibit 3	1.7541	1.7541	1.7541
3	Total Base Fuel Cost Component		2.1146	2.1146	2.1146
<b>Capacity Related Costs</b>					
4	PURPA Purchased Power Component Under / (Over) at September 2019	Exhibit 6 Page 1, 2, 3	(0.0197)	(0.0403)	(0.0333)
5	Capacity Related Cost Component Projected Billing Period	Exhibit 7	0.1983	0.1039	0.0705
6	Total Capacity Related Cost Component	Line 4 + 5	0.1786	0.0636	0.0372
<b>Distributed Energy Resource Program Avoided Costs</b>					
7	DERP Avoided Costs Component Under / (Over) at September 2019	Exhibit 12 Page 1,2,3	0.0001	(0.0001)	(0.0002)
8	DERP Avoided Costs Component Projected Billing Period	Exhibit 13	0.0025	0.0013	0.0009
9	Total DERP Avoided Costs Component	Line 7 + 8	0.0026	0.0012	0.0007
<b>Environmental Costs</b>					
10	Environmental Component Under / (Over) at September 2019	Exhibit 4 Page 1, 2, 3	0.0096	(0.0017)	(0.0022)
11	Environmental Component Projected Billing Period	Exhibit 5	0.0507	0.0266	0.0180
12	Total Environmental Component	Line 10 + 11	0.0603	0.0249	0.0158
13	<b>Total Fuel Billing Factors</b>	Sum Line 3 + Line 6 + Line 9 + Line 12	<b>2.3561</b>	<b>2.2043</b>	<b>2.1683</b>

## Distributed Energy Resource Program Incremental Cost per Account

			General		
			Residential	Service	Industrial
<b>DERP Incremental Under / (Over) at September 2019</b>					
14	Annual Charge / (Credit)	Exhibit 9	\$ (1.51)	\$ (4.76)	\$ (230.32)
15	Monthly Charge / (Credit)	Exhibit 9	\$ (0.13)	\$ (0.40)	\$ (19.19)
<b>DERP Incremental Projected Billing Period</b>					
16	Annual Charge	Exhibit 11	\$ 8.92	\$ 28.19	\$ 1,363.57
17	Monthly Charge	Exhibit 11	\$ 0.74	\$ 2.35	\$ 113.63
18	<b>Total DERP Annual Charge - excluding GRT</b>	Line 14 + Line 16	<b>\$ 7.41</b>	<b>\$ 23.44</b>	<b>\$ 1,133.25</b>
19	<b>Total DERP Monthly Charge - excluding GRT</b>	Line 15 + Line 17	<b>\$ 0.62</b>	<b>\$ 1.95</b>	<b>\$ 94.44</b>
20	<b>Total DERP Annual Charge per account CAP</b>		<b>\$ 12.00</b>	<b>\$ 120.00</b>	<b>\$ 1,200.00</b>
21	<b>Total DERP Annual Charge - including GRT</b>	Line 18 / (1-Tax Rate)	<b>\$ 7.45</b>	<b>\$ 23.56</b>	<b>\$ 1,138.93</b>
22	<b>Total DERP Monthly Charge - including GRT</b>	Line 19 / (1-Tax Rate)	<b>\$ 0.62</b>	<b>\$ 1.96</b>	<b>\$ 94.91</b>

Totals may not sum due to rounding

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF BASE FUEL (OVER) / UNDER RECOVERY  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018
1	Coal		\$ 79,886,104	\$ 62,855,312	\$ 68,408,695	\$ 67,343,697	\$ 37,787,575	\$ 43,384,931
2	Gas		36,914,950	45,575,071	37,243,916	36,438,302	31,301,127	41,370,503
3	Nuclear Fuel		23,770,804	24,561,314	24,555,250	20,886,708	20,475,919	21,358,058
4	Purchased Power		23,849,355	37,871,044	37,835,866	44,342,725	46,650,064	39,500,513
5	Fuel Expense Recovered Through Intersystem Sales		(9,702,995)	(1,517,778)	(3,304,087)	(9,957,096)	(3,278,924)	(6,981,187)
6	Total Fuel Costs	Sum Lines 1 - 5	\$ 154,718,218	\$ 169,344,963	\$ 164,739,641	\$ 159,054,336	\$ 132,935,761	\$ 138,632,817
7	Eliminate Avoided Fuel Benefit of SC NEM		307,812	313,612	323,047	330,116	332,039	336,077
8	Adjusted System Fuel costs	Line 6 + Line 7	\$ 155,026,030	\$ 169,658,575	\$ 165,062,688	\$ 159,384,452	\$ 133,267,800	\$ 138,968,894
9	Total System KWH Sales		7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955
10	Eliminate NEM Solar Generation kwhs		9,516,148	9,695,409	9,987,053	10,205,632	10,227,605	10,343,935
11	Adjusted Projected System kwh Sales	Line 9 + Line 10	8,009,317,385	8,486,873,480	8,267,869,991	9,507,963,860	6,345,056,567	6,681,164,890
12	System cost ¢/kwh	(Line 8 *100) / (Line 11)	1.9356	1.9991	1.9964	1.6763	2.1003	2.0800
13	Actual/Projected SC Retail Sales kWh (w/solar)		1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344
14	Eliminate the NEM impact of Solar Generation kWhs		9,516,148	9,695,409	9,987,053	10,205,632	10,227,605	10,343,935
15	Adjusted Actual/Projected SC Retail Sales kWh (w/o solar)	Line 13 + Line 14	1,970,259,530	2,001,436,494	2,019,596,831	2,459,970,752	1,489,714,135	1,644,780,279
16	SC Base Fuel Costs	Line 12 * Line 15 /100	\$ 38,135,773	\$ 40,010,124	\$ 40,319,948	\$ 41,237,125	\$ 31,289,070	\$ 34,211,593
17	Assign 100% of avoided fuel benefit of SC NEM	-Line 7	(307,812)	(313,612)	(323,047)	(330,116)	(332,039)	(336,077)
18	Adjusted SC Base Fuel Costs	Line 16 + Line 17	\$ 37,827,961	\$ 39,696,512	\$ 39,996,901	\$ 40,907,009	\$ 30,957,031	\$ 33,875,516
19	Fuel Costs Collected - non capacity revenue	Company Record	\$ 33,862,039	\$ 34,397,368	\$ 34,705,960	\$ 42,307,443	\$ 26,966,677	\$ 32,093,709
20	Fuel Benefit given in SC NEM Incentive		(149,779)	(152,550)	(157,066)	(155,758)	(151,335)	(153,111)
21	Adjusted Fuel Costs Collected	Line 19 + Line 20	33,712,260	34,244,818	34,548,894	\$ 42,151,685	26,815,342	31,940,598
22	(Over)/Under Current Month	Line 21-Line 18	\$ 4,115,701	\$ 5,451,694.29	\$ 5,448,007	\$ (1,244,676)	\$ 4,141,689	\$ 1,934,918
23	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	64,562,410	-	-	-	-	-
24	Adjustment		(20,332)	-	-	-	(1,252)	-
25	(Over)/Under Cumulative Balance	PM Cum Bal + Line 22 + Line 24	\$ 68,657,779	\$ 74,109,473	\$ 79,557,480	\$ 78,312,803	\$ 82,453,241	\$ 84,388,159

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
26	Coal		\$ 48,664,815	\$ 49,654,891	\$ 16,745,387	\$ 50,086,667	\$ 46,160,016	\$ 65,497,339	\$ 636,475,429
27	Gas		37,288,136	48,290,338	39,033,198	30,417,245	21,268,188	34,105,881	439,246,856
28	Nuclear Fuel		23,069,842	24,333,126	22,036,626	22,301,225	18,932,863	23,519,194	269,800,929
29	Purchased Power		60,817,733	38,966,318	90,915,146	24,632,446	29,168,909	16,590,753	491,140,874
30	Fuel Expense Recovered Through Intersystem Sales		(7,350,981)	(12,402,097)	(3,599,063)	(7,592,387)	(6,831,303)	(7,795,568)	(80,313,467)
31	Total Fuel Costs	Sum Lines 26 - 30	\$ 162,489,546	\$ 148,842,576	\$ 165,131,295	\$ 119,845,197	\$ 108,698,672	\$ 131,917,600	\$ 1,756,350,621
32	Eliminate Avoided Fuel Benefit of SC NEM		338,332	345,919	347,892	350,373	352,074	355,651	4,032,944
33	Adjusted System Fuel costs	Line 31 + Line 32	\$ 162,827,878	\$ 149,188,495	\$ 165,479,187	\$ 120,195,569	\$ 109,050,746	\$ 132,273,251	\$ 1,760,383,565
34	Total System KWH Sales (w/solar)		7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
35	Eliminate NEM Solar Generation kwhs		10,412,429	10,645,948	10,706,640	10,783,000	10,835,324	10,945,408	124,304,531
36	Adjusted Projected System kwh Sales (w/o solar)	Line 34 + Line 35	7,500,839,324	7,570,888,821	7,430,788,664	6,521,808,145	6,367,436,322	6,726,545,218	89,416,552,667
37	System cost ¢/kwh	Line 33 / Line 36 * 100	2.1708	1.9706	2.2269	1.8430	1.7126	1.9664	
38	Actual/Projected SC Retail Sales kWh (w/solar)		1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
39	Eliminate the NEM impact of Solar Generation kWhs		10,412,429	10,645,948	10,706,640	10,783,000	10,835,324	10,945,408	124,304,531
40	Adjusted Actual/Projected SC Retail Sales kWh (w/o solar)	Line 38 + Line 39	1,807,572,190	1,804,193,304	1,816,482,977	1,574,347,949	1,584,730,992	1,678,909,620	21,851,995,053
41	SC Base Fuel Costs	Line 37 * Line 40 /100	\$ 39,238,695	\$ 35,552,613	\$ 40,451,982	\$ 29,014,906	\$ 27,140,609	\$ 33,014,694	429,617,132
42	Assign 100% of avoided fuel benefit of SC NEM	-Line 32	(338,332)	(345,919)	(347,892)	(350,373)	(352,074)	(355,651)	(4,032,944)
43	Adjusted SC Base Fuel Costs	Line 41 + Line 42	\$ 38,900,363	\$ 35,206,694	\$ 40,104,090	\$ 28,664,533	\$ 26,788,535	\$ 32,659,043	425,584,188
44	Fuel Costs Collected - non capacity revenue	Company Records	\$ 35,310,595	\$ 35,239,619	\$ 35,479,893	\$ 30,720,924	\$ 30,923,902	\$ 32,772,161	404,780,290
45	Fuel Benefit given in SC NEM Incentive		(144,085)	(147,256)	(148,085)	(149,143)	(149,859)	(151,381)	(1,809,408)
46	Adjusted Fuel Costs Collected	Line 44 + Line 45	\$ 35,166,510	\$ 35,092,363	\$ 35,331,808	\$ 30,571,781	\$ 30,774,043	\$ 32,620,780	402,970,882
47	(Over)/Under Current Month	Line 43 - Line 46	\$ 3,733,853	\$ 114,331	\$ 4,772,281	\$ (1,907,248)	\$ (3,985,508)	\$ 38,263	\$ 22,613,306
48	Adjustments		-	29,135				(58,780)	(51,231)
50	(Over)/Under Cumulative Balance	PM Line 50 + Line 47 + Line 48	\$ 88,122,011	\$ 88,265,478	\$ 93,037,759	\$ 91,130,510	\$ 87,145,002	\$ 87,124,485	\$ 87,124,485

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF BASE FUEL (OVER) / UNDER RECOVERY  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.	Description	Reference	Estimated June 2019	Estimated July 2019	Estimated August 2019	Estimated September 2019
51	Coal		\$ 60,828,963	\$ 81,082,928	\$ 77,420,069	\$ 57,931,968
52	Gas		29,132,975	31,137,597	30,373,226	26,374,941
53	Nuclear Fuel		23,151,020	24,209,098	23,863,373	20,281,583
54	Purchased Power		27,968,319	30,194,308	28,282,417	28,400,426
55	Fuel Expense Recovered Through Intersystem Sales		(62,887)	(823,660)	(505,006)	(227,703)
56	Total Fuel Costs	Sum of Lines 51-55	\$ 141,018,390	\$ 165,800,272	\$ 159,434,080	\$ 132,761,216
57	Eliminate Avoided Fuel Benefit of SC NEM		427,930	414,192	373,514	344,605
58	Adjusted System Fuel costs	Line 56 + Line 57	\$ 141,446,319	\$ 166,214,464	\$ 159,807,594	\$ 133,105,821
59	Total Projected System KWH Sales (w/solar)		7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172
60	Eliminate NEM Solar Generation kwhs		13,167,066	12,744,382	11,492,743	10,603,218
61	Adjusted Projected System kwh Sales(w/o solar)	Line 59 and 60	7,110,958,740	8,141,412,647	8,691,820,374	8,139,631,391
62	System cost ¢/kwh	Line 58 / Line 61 * 100	1.9891	2.0416	1.8386	1.6353
63	Projected SC Retail Sales kWh (w/solar)		1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150
64	Assign 100% of avoided fuel benefit of SC NEM		13,167,066	12,744,382	11,492,743	10,603,218
65	Projected SC Retail Sales kWh (w/o solar)	Line 63 + Line 64	1,755,267,623	1,981,556,913	2,137,309,790	2,039,840,369
66	SC Base Fuel Costs	Line 65 * Line 62 / 100	\$ 34,914,581	\$ 40,455,316	\$ 39,296,525	\$ 33,357,116
67	Assign 100% of avoided fuel benefit of SC NEM		(427,930)	(414,192)	(373,514)	(344,605)
68	Adjusted SC Base Fuel Costs	Line 66 + Line 67	\$ 34,486,651	\$ 40,041,123	\$ 38,923,011	\$ 33,012,511
69	Estimated Base Fuel Cost Collected	Line 63 * 1.727 / 100	\$ 34,228,792	\$ 38,683,229	\$ 41,768,053	\$ 39,870,452
70	Fuel Benefit given in SC NEM Incentive		182,731	176,882	159,503	147,147
71	Adjusted Fuel Costs Collected	Line 69 + Line 70	\$ 34,411,523	\$ 38,860,111	\$ 41,927,556	\$ 40,017,599
72	(Over)/Under Current Month	Line 68 - Line 71	\$ 75,129	\$ 1,181,013	\$ (3,004,545)	\$ (7,005,088)
73	Adjustment		-	-	-	-
74	(Over)/Under Cumulative Balance	PM Cum bal + current mo. Lines 72 and 73	\$ 87,199,614	\$ 88,380,626	\$ 85,376,081	\$ 78,370,993
75	Estimated Interest on Deferred 2018 under-collection balance					\$ 544,982
76	Total (Over)/Under Cumulative Balance	Line 74 + Line 75				\$ 78,915,975
77	Projected SC Retail Sales kwhs (October 2019-September 2020)					21,886,062,443
78	SC Base Fuel Rate (cents / kWh)	Line 76 / Line 77 * 100				0.3606

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF PROJECTED BILLING PERIOD BASE FUEL COSTS BILLING FACTORS**  
**FOR THE 12 MONTHS OCTOBER 2019 TO SEPTEMBER 2020**

Line No.	Description	Reference	October 2019	November 2019	December 2019	January 2020	February 2020	March 2020
1	Coal		\$ 41,252,633	\$ 51,960,977	\$ 52,956,356	\$ 81,427,242	\$ 77,351,494	\$ 49,643,458
2	Gas		16,590,137	20,796,028	26,041,858	24,841,783	22,475,321	26,179,843
3	Nuclear Fuel		21,783,691	21,218,655	23,243,184	24,835,692	23,094,320	21,575,371
4	Purchased Power		22,922,319	28,521,640	29,524,243	14,982,864	15,971,356	29,387,794
5	Fuel Expense Recovered Through Intersystem Sales		(190,900)	(326,933)	(253,129)	(6,289,088)	(4,807,317)	(532,793)
6	Total Fuel Costs	Sum Lines 1 - 5	\$ 102,357,881	\$ 122,170,368	\$ 131,512,511	\$ 139,798,494	\$ 134,085,174	\$ 126,253,673
7	Eliminate Avoided Fuel Benefit of SC NEM		351,913	254,878	203,878	289,264	325,939	386,031
8	Adjusted System Fuel costs	Line 6 + Line 7	\$ 102,709,794	\$ 122,425,246	\$ 131,716,389	\$ 140,087,758	\$ 134,411,113	\$ 126,639,704
9	Total Projected System Sales kwhs (w/solar)		6,803,214,198	6,495,662,262	7,186,884,482	7,903,467,722	7,808,874,524	7,353,013,933
10	Eliminate NEM Solar Generation kwhs		10,819,149	7,835,922	6,267,988	8,893,091	10,020,613	11,868,059
11	Adjusted Projected System kwh Sales(w/o solar)	Line 9 + Line 10	6,814,033,348	6,503,498,184	7,193,152,470	7,912,360,812	7,818,895,138	7,364,881,993
12	System Cost per kwh (¢/kwh)	Line 8 / Line 11 * 100	1.5073	1.8825	1.8311	1.7705	1.7191	1.7195
13	Adjusted Projected SC Retail Sales kwhs(w/o solar)		1,717,069,835	1,628,905,252	1,758,565,782	1,911,997,118	1,915,487,947	1,835,240,173
14	SC Base Fuel Costs	Line 13 * Line 12 / 100	\$ 25,881,865	\$ 30,663,363	\$ 32,201,727	\$ 33,851,766	\$ 32,928,293	\$ 31,557,094
15	Assign 100% of Avoided Fuel Benefit of SC NEM <sup>(Note 1)</sup>		(124,573)	(90,225)	(72,183)	(102,408)	(115,385)	(136,649)
16	Adjusted SC Base Fuel Costs	Line 14 + Line 15	\$ 25,757,292	\$ 30,573,138	\$ 32,129,544	\$ 33,749,358	\$ 32,812,908	\$ 31,420,445

Line No.	Description	Reference	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020	12 Month Total
17	Coal		\$ 40,782,963	\$ 40,993,152	\$ 53,395,223	\$ 68,023,505	\$ 62,801,602	\$ 44,172,566	\$ 664,761,172
18	Gas		20,470,419	31,860,652	31,518,064	36,442,096	35,409,002	31,914,085	324,539,286
19	Nuclear Fuel		19,515,653	18,884,771	23,234,465	23,981,600	23,947,922	21,341,714	266,657,039
20	Purchased Power		28,048,895	31,719,853	29,785,107	32,039,201	29,094,400	19,040,666	311,038,337
21	Fuel Expense Recovered Through Intersystem Sales		(44,433)	(192,423)	(173,430)	(870,135)	(321,552)	(110,712)	(14,112,844)
22	Total Fuel Costs	Sum Lines 17 through 22	\$ 108,773,497	\$ 123,266,005	\$ 137,759,428	\$ 159,616,268	\$ 150,931,374	\$ 116,358,318	\$ 1,552,882,990
23	Eliminate Avoided Fuel Benefit of SC NEM		488,505	484,444	498,131	470,521	417,015	378,290	4,548,809
24	Adjusted System Fuel costs	Line 22 + Line 23	\$ 109,262,002	\$ 123,750,449	\$ 138,257,559	\$ 160,086,789	\$ 151,348,389	\$ 116,736,608	\$ 1,557,431,799
25	Total Projected System Sales kwhs (w/solar)		6,672,124,994	6,463,555,894	7,048,447,873	8,241,762,239	8,635,074,609	8,178,560,496	88,790,643,227
26	Eliminate NEM Solar Generation kwhs		15,018,500	14,893,615	15,314,430	14,465,610	12,820,614	11,630,069	139,847,661
27	Adjusted Projected System kwh Sales(w/o solar)	Line 25 + Line 26	6,687,143,494	6,478,449,509	7,063,762,303	8,256,227,849	8,647,895,223	8,190,190,565	88,930,490,888
28	System Cost per kwh (¢/kwh)	Line 24 / Line 27 *100	1.6339	1.9102	1.9573	1.9390	1.7501	1.4253	1.7513
29	Adjusted Projected SC Retail Sales kwhs(w/o solar)		1,702,914,090	1,636,574,992	1,741,960,846	2,005,092,800	2,123,398,426	2,048,702,843	22,025,910,104
30	SC Base Fuel Costs	Line 28 * Line 29 / 100	\$ 27,824,108	\$ 31,261,630	\$ 34,095,039	\$ 38,878,393	\$ 37,161,982	\$ 29,200,617	\$ 385,505,877
31	Assign 100% of Avoided Fuel Benefit of SC NEM <sup>(Note 1)</sup>		(172,916)	(171,473)	(176,335)	(166,558)	(147,615)	(133,910)	(1,610,230)
32	Adjusted SC Base Fuel Costs	Line 30 + Line 31	\$ 27,651,192	\$ 31,090,157	\$ 33,918,704	\$ 38,711,834	\$ 37,014,367	\$ 29,066,708	\$ 383,895,647
<b>Projected SC Retail Sales kWh (October 2019 - September 2020)</b>									
33	Residential								6,728,320,673
34	General Service/Lighting								5,986,473,078
35	Industrial								9,171,268,692
36	Total SC	Sum Lines 33 through 35							21,886,062,443
37	SC Base Fuel Rate (cents / kWh)	Line 32 / Line 36 * 100							1.7541

Note 1 - Equals total NEM avoided fuel benefit less portion included in DERP NEM Incentive.

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - RESIDENTIAL**  
**ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019**

Line No.			<b>Residential</b>				<b>Residential</b>			
1	2017 Firm Coincident Peak CP %		38.68%				51.25%			
Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018		
2	Total Reagents		\$ 3,686,572	\$ 3,020,625	\$ 2,491,911	\$ 2,357,510	\$ 1,417,811	\$ 1,653,035		
3	Emission Allowances		365	484	367	432	413	195		
4	Off-System Sales		(26,296)	(1,952)	(2,624)	(9,866)	(3,627)	(39,062)		
5	Net Environmental Costs	Sum Lines 3 - 5	\$ 3,660,641	\$ 3,019,157	\$ 2,489,653	\$ 2,348,076	\$ 1,414,597	\$ 1,614,168		
6	Total System KWH Sales	Exhibit 2	7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955		
7	Environmental System Costs Incurred (¢ per Kwh)	Line 5 / Line 6 * 100	0.0458	0.0356	0.0301	0.0247	0.0223	0.0242		
8	SC Retail Sales kWh	Exhibit 2	1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344		
9	SC Environmental Costs	Line 7 * Line 8 / 100	\$ 897,219	\$ 709,361	\$ 605,873	\$ 605,642	\$ 330,377	\$ 395,492		
10	Residential Environmental Cost Allocated by Firm CP	Line 9 * Line 1	\$ 348,492	\$ 275,525	\$ 235,329	\$ 234,274	\$ 127,796	\$ 152,984		
11	SC Residential kWh Sales		609,213,656	685,061,515	638,545,237	696,736,494	491,727,445	435,458,622		
12	SC Residential Environmental Cost Incurred (¢ per Kwh)	Line 10 / Line 11 * 100	0.0572	0.0402	0.0369	0.0336	0.0260	0.0351		
13	SC Residential Environmental Cost Billed (¢ per Kwh)	Company records	0.0331	0.0331	0.0331	0.0331	0.0265	0.0167		
14	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 13 + Line 12)*Line 11 /100	\$ 146,842	\$ 48,770	\$ 23,971	\$ 3,654	\$ (2,312)	\$ 80,334		
15	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	\$ (1,147,694)							
16	Accounting Adjustment(s)					\$ (3,528)				
17	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Line 14 + Line 16 + PM Cum Bal	\$ (1,000,852)	\$ (952,082)	\$ (928,112)	\$ (927,985)	\$ (930,297)	\$ (849,963)		

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
18	Total Reagents		\$ 1,549,133	\$ 1,792,047	\$ 782,718	\$ 1,562,451	\$ 1,467,946	\$ 1,999,466	\$ 23,781,226
19	Emission Allowances		305	258	230	-	191	(21)	3,218
20	Off-System Sales		(9,758)	(57,154)	4,755	(60,062)	(43,640)	(105,980)	(355,266)
21	Net Environmental Costs	Sum Lines 18 - 20	\$ 1,539,681	\$ 1,735,151	\$ 787,703	\$ 1,502,389	\$ 1,424,497	\$ 1,893,465	\$ 23,429,178
22	Total System KWH Sales	Exhibit 2	7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
23	Environmental System Costs Incurred (¢ per Kwh)	Line 21 / Line 22* 100	0.0206	0.0230	0.0106	0.0231	0.0224	0.0282	
24	SC Retail Sales kWh	Exhibit 2	1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
25	SC Environmental Costs	Line 23 * Line 24/ 100	\$ 369,412	\$ 411,636	\$ 191,698	\$ 360,785	\$ 352,706	\$ 470,283	\$ 5,700,485
26	Residential Environmental Cost Allocated by Firm CP	Line 25 * Line 1	\$ 142,896	\$ 210,964	\$ 98,245	\$ 184,903	\$ 180,762	\$ 241,021	\$ 2,433,190
27	SC Residential kWh Sales		628,501,539	657,177,943	610,321,704	480,884,048	414,875,999	447,612,785	6,796,116,987
28	SC Residential Environmental Cost Incurred (¢ per Kwh)	Line 26 / Line 27 * 100	0.0227	0.0321	0.0161	0.0385	0.0436	0.0538	
29	SC Residential Environmental Cost Billed (¢ per Kwh)	Company records	0.0166	0.0166	0.0166	0.0166	0.0166	0.0166	
30	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 29 + Line 28)*Line 27 /100	\$ 38,565	\$ 101,872	\$ (3,068)	\$ 105,076	\$ 111,893	\$ 166,717	\$ 822,315
31	Accounting Adjustment(s)								(3,528)
32	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Line 30 + Line 31 + PM Cum Bal	\$ (811,397)	\$ (709,525)	\$ (712,593)	\$ (607,517)	\$ (495,624)	\$ (328,907)	\$ (328,907)

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - RESIDENTIAL  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.		Residential				Residential
1	2017 Firm Coincident Peak CP %	38.68%			2018 Firm Coincident Peak CP %	51.25%
Line No.	Description	Reference	Estimated June 2019	Estimated July 2019	Estimated August 2019	Estimated September 2019
33	Total Reagents		\$ 2,279,328	\$ 3,177,248	\$ 3,131,075	\$ 2,379,370
34	Emission Allowances		337	517	513	348
35	Off-System Sales		(935)	(12,520)	(7,668)	(3,445)
36	Net Environmental Costs	Sum Lines 33- 35	\$ 2,278,729	\$ 3,165,244	\$ 3,123,920	\$ 2,376,273
37	Total Projected System Sales kwhs (w/solar)	Exhibit 2	7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172
38	Environmental System Costs Incurred (¢ per Kwh)	Line 36 / Line 37* 100	0.0321	0.0389	0.0360	0.0292
39	Projected SC Retail Sales kWh	Exhibit 2	1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150
40	SC Environmental Costs	Line 38 * Line 39/ 100	\$ 559,297	\$ 766,641	\$ 765,050	\$ 593,186
41	Residential Environmental Cost Allocated by Firm CP	Line 40 * Line 1	\$ 286,640	\$ 392,905	\$ 392,089	\$ 304,008
42	SC Projected Residential kWh Sales		486,895,816	619,213,465	687,169,454	628,981,205
43	SC Residential Environmental Cost Incurred (¢ per Kwh)	Line 41 / Line 42 * 100	0.0589	0.0635	0.0571	0.0483
44	SC Residential Environmental Cost Billed (¢ per Kwh)	Company records	0.0166	0.0166	0.0166	0.0166
45	SC Residential Environmental Costs (Over) / Under Recovery	(-Line 44 + Line 43) * Line 42 /100	\$ 205,816	\$ 290,115	\$ 278,019	\$ 199,597
46	Cumulative SC Residential Environmental Costs (Over) / Under Recovery	Line 45 + PM Cum Bal	\$ (123,092)	\$ 167,023	\$ 445,042	\$ 644,640
47	SC Projected Residential Sales (October 2019-September 2020)	Exhibit 3				6,728,320,673
48	SC Residential Environmental Increment / (Decrement) (¢ per Kwh)	Line 46 / Line 47 * 100				0.0096

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY - GENERAL SERVICE/LIGHTING**  
**ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019**

Line No.	General Service / Lighting			General Service / Lighting				
1	2017 Firm Coincident Peak CP %	28.28%			2018 Firm Coincident Peak CP %	23.90%		
Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018
2	Total Reagents		\$ 3,686,572	\$ 3,020,625	\$ 2,491,911	\$ 2,357,510	\$ 1,417,811	\$ 1,653,035
3	Emission Allowances		365	484	367	432	413	195
4	Off-System Sales		(26,296)	(1,952)	(2,624)	(9,866)	(3,627)	(39,062)
5	Net Environmental Costs	Sum Lines 3 - 5	\$ 3,660,641	\$ 3,019,157	\$ 2,489,653	\$ 2,348,076	\$ 1,414,597	\$ 1,614,168
6	Total System KWH Sales	Exhibit 2	7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955
7	Environmental System Costs Incurred (¢ per Kwh)	Line 5 / Line 6 * 100	0.0458	0.0356	0.0301	0.0247	0.0223	0.0242
8	SC Retail Sales kWh	Exhibit 2	1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344
9	SC Environmental Costs	Line 7 * Line 8 / 100	\$ 897,219	\$ 709,361	\$ 605,873	\$ 605,641	\$ 330,376	\$ 395,492
10	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 9 * Line 1	\$ 253,208	\$ 200,192	\$ 170,986	\$ 171,296	\$ 93,442	\$ 111,859
11	SC General Service / Lighting kWh Sales		532,609,815	555,007,748	534,768,585	608,217,191	471,984,556	426,666,805
12	SC General Service / Lighting Environmental Cost Incurred (¢ per Kwh)	Line 10 / Line 11 * 100	0.0475	0.0361	0.0320	0.0282	0.0198	0.0262
13	SC General Service / Lighting Environmental Cost Billed (¢ per Kwh)	Company records	0.0415	0.0415	0.0415	0.0415	0.0326	0.0194
14	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 13 + Line 12)*Line 11 /100	\$ 32,175	\$ (30,136)	\$ (50,943)	\$ (81,114)	\$ (60,262)	\$ 29,032
15	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	\$ (178,848)					
16	Accounting Adjustment(s)					1,373		
17	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 14 + Line 16 + PM Cum Bal	\$ (146,673)	\$ (176,809)	\$ (227,752)	\$ (307,493)	\$ (367,755)	\$ (338,723)

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
18	Total Reagents		\$ 1,549,133	\$ 1,792,047	\$ 782,718	\$ 1,562,451	\$ 1,467,946	\$ 1,999,466	\$ 23,781,226
19	Emission Allowances		305	258	230	-	191	(21)	3,218
20	Off-System Sales		(9,758)	(57,154)	4,755	(60,062)	(43,640)	(105,980)	(355,266)
21	Net Environmental Costs	Sum Lines 18 - 20	\$ 1,539,681	\$ 1,735,151	\$ 787,703	\$ 1,502,389	\$ 1,424,497	\$ 1,893,465	\$ 23,429,178
22	Total System KWH Sales	Exhibit 2	7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
23	Environmental System Costs Incurred (¢ per Kwh)	Line 21 / Line 22* 100	0.0206	0.0230	0.0106	0.0231	0.0224	0.0282	
24	SC Retail Sales kWh	Exhibit 2	1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
25	SC Environmental Costs	Line 23 * Line 24/ 100	\$ 369,412	\$ 411,637	\$ 191,698	\$ 360,785	\$ 352,706	\$ 470,283	\$ 5,700,484
26	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 25 * Line 1	\$ 104,482	\$ 98,386	\$ 45,818	\$ 86,232	\$ 84,301	\$ 112,403	\$ 1,532,605
27	SC General Service / Lighting kWh Sales		445,252,198	455,887,041	446,297,147	406,630,406	413,949,578	461,349,327	5,758,620,397
28	SC General Service / Lighting Environmental Cost Incurred (¢ per Kwh)	Line 26 / Line 27 * 100	0.0235	0.0216	0.0103	0.0212	0.0204	0.0244	
29	SC General Service / Lighting Environmental Cost Billed (¢ per Kwh)	Company Records	0.0193	0.0193	0.0193	0.0193	0.0193	0.0193	
30	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 29 + Line 28)*Line 27 /100	\$ 18,548	\$ 10,400	\$ (40,317)	\$ 7,752	\$ 4,409	\$ 23,363	\$ (137,094)
31	Accounting Adjustment(s)								\$ 1,373
32	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 30 + Line 31 + PM Cum Bal	\$ (320,175)	\$ (309,775)	\$ (350,093)	\$ (342,340)	\$ (337,932)	\$ (314,569)	\$ (314,569)



DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-GENERAL SERVICE/ LIGHTING  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.		General Service / Lighting		General Service /Lighting
1	2017 Firm Coincident Peak CP %	28.28%	2018 Firm Coincident Peak CP %	23.90%

  

Line No.	Description	Reference	Estimated June 2019	Estimated July 2019	Estimated August 2019	Estimated September 2019
33	Total Reagents		\$ 2,279,328	\$ 3,177,248	\$ 3,131,075	\$ 2,379,370
34	Emission Allowances		337	517	513	348
35	Off-System Sales		(935)	(12,520)	(7,668)	(3,445)
36	Net Environmental Costs	Sum Lines 33 - 35	\$ 2,278,729	\$ 3,165,244	\$ 3,123,920	\$ 2,376,273
37	Total Projected System Sales kwhs (w/solar)		7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172
38	Environmental System Costs Incurred (¢ per Kwh)	Line 36 / Line 37* 100	0.0321	0.0389	0.0360	0.0292
39	Projected SC Retail Sales kWh		1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150
40	SC Environmental Costs	Line 38 * Line 39/ 100	\$ 559,297	\$ 766,641	\$ 765,050	\$ 593,186
41	General Service / Lighting Environmental Cost Allocated by Firm CP	Line 40 * Line 1	\$ 133,679	\$ 183,236	\$ 182,856	\$ 141,778
42	SC Projected General Service / Lighting kWh Sales		503,131,126	558,701,811	586,229,211	562,074,280
43	SC General Service / Lighting Environmental Cost Incurred (¢ per Kwh)	Line 41 / Line 42 * 100	0.0266	0.0328	0.0312	0.0252
44	SC General Service / Lighting Environmental Cost Billed (¢ per Kwh)	Company Records	0.0193	0.0193	0.0193	0.0193
45	SC General Service / Lighting Environmental Costs (Over) / Under Recovery	(-Line 44 + Line 43) * Line 42 /100	\$ 36,574	\$ 75,407	\$ 69,714	\$ 33,298
46	Cumulative SC General Service / Lighting Environmental Costs (Over) / Under Recovery	Line 45 + PM Cum Bal	\$ (277,994)	\$ (202,588)	\$ (132,874)	\$ (99,576)
47	SC Projected General Service / Lighting Sales (October 2019 - September 2020)	Exhibit 3				5,986,473,078
48	SC General Service / Lighting Environmental Increment / (Decrement) (¢ per Kwh)	Line 46 / Line 47 * 100				(0.0017)

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-INDUSTRIAL**  
**ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019**

Line No.		Industrial		Industrial
1	2017 Firm Coincident Peak CP %	33.03%	2018 Firm Coincident Peak CP %	24.85%

  

Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018
2	Total Reagents		\$ 3,686,572	\$ 3,020,625	\$ 2,491,911	\$ 2,357,510	\$ 1,417,811	\$ 1,653,035
3	Emission Allowances		365	484	367	432	413	195
4	Off-System Sales		(26,296)	(1,952)	(2,624)	(9,866)	(3,627)	(39,062)
5	Net Environmental Costs	Sum Lines 3 - 5	\$ 3,660,641	\$ 3,019,157	\$ 2,489,653	\$ 2,348,076	\$ 1,414,597	\$ 1,614,168
6	Total System KWH Sales	Exhibit 2	7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955
7	Environmental System Costs Incurred (¢ per Kwh)	Line 5 / Line 6 * 100	0.0458	0.0356	0.0301	0.0247	0.0223	0.0242
8	SC Retail Sales kWh	Exhibit 2	1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344
9	SC Environmental Costs	Line 7 * Line 8 / 100	\$ 897,219	\$ 709,361	\$ 605,873	\$ 605,641	\$ 330,376	\$ 395,492
10	Industrial Environmental Cost Allocated by Firm CP	Line 9 * Line 1	\$ 295,519	\$ 233,644	\$ 199,558	\$ 200,072	\$ 109,139	\$ 130,649
11	SC Industrial kWh Sales		818,919,911	751,671,822	836,295,956	1,144,811,435	515,774,529	772,310,917
12	SC Industrial Environmental Cost Incurred (¢ per Kwh)	Line 10 / Line 11 * 100	0.0361	0.0311	0.0239	0.0175	0.0212	0.0169
13	SC Industrial Environmental Cost Billed (¢ per Kwh)	Company records	0.0267	0.0267	0.0267	0.0267	0.0227	0.0169
14	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 13 + Line 12)*Line 11 /100	\$ 76,867	\$ 32,948	\$ (23,733)	\$ (105,593)	\$ (8,022)	\$ 513
15	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	\$ (135,329)					
16	Accounting Adjustment(s)					\$ 2,155		
17	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 14 + Line 16 + PM Cum Bal	\$ (58,462)	\$ (25,514)	\$ (49,247)	\$ (152,685)	\$ (160,707)	\$ (160,194)

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
18	Total Reagents		\$ 1,549,133	\$ 1,792,047	\$ 782,718	\$ 1,562,451	\$ 1,467,946	\$ 1,999,466	\$ 23,781,226
19	Emission Allowances		305	258	230	-	191	(21)	3,218
20	Off-System Sales		(9,758)	(57,154)	4,755	(60,062)	(43,640)	(105,980)	(355,266)
21	Net Environmental Costs	Sum Lines 18 - 20	\$ 1,539,681	\$ 1,735,151	\$ 787,703	\$ 1,502,389	\$ 1,424,497	\$ 1,893,465	\$ 23,429,178
22	Total System KWH Sales	Exhibit 2	7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
23	Environmental System Costs Incurred (¢ per Kwh)	Line 21 / Line 22* 100	0.0206	0.0230	0.0106	0.0231	0.0224	0.0282	
24	SC Retail Sales kWh	Exhibit 2	1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
25	SC Environmental Costs	Line 23 * Line 24/ 100	\$ 369,412	\$ 411,637	\$ 191,698	\$ 360,785	\$ 352,706	\$ 470,283	\$ 5,700,484
26	Industrial Environmental Cost Allocated by Firm CP	Line 25 * Line 1	\$ 122,034	\$ 102,286	\$ 47,634	\$ 89,650	\$ 87,643	\$ 116,859	\$ 1,734,688
27	SC Industrial kWh Sales		723,406,024	680,482,372	749,157,486	676,050,495	745,070,091	759,002,100	9,172,953,138
28	SC Industrial Environmental Cost Incurred (¢ per Kwh)	Line 26 / Line 27 * 100	0.0169	0.0150	0.0064	0.0133	0.0118	0.0154	
29	SC Industrial Environmental Cost Billed (¢ per Kwh)	Company Records	0.0168	0.0168	0.0168	0.0168	0.0168	0.0168	
30	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 29 + Line 28)*Line 27 /100	\$ 502	\$ (12,035)	\$ (78,224)	\$ (23,926)	\$ (37,529)	\$ (10,653)	\$ (188,885)
31	Accounting Adjustment(s)								\$ 2,155
32	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 30 + Line 31 + PM Cum Bal	\$ (159,693)	\$ (171,727)	\$ (249,951)	\$ (273,877)	\$ (311,406)	\$ (322,059)	\$ (322,059)

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF ENVIRONMENTAL (OVER) / UNDER RECOVERY-INDUSTRIAL  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.		Industrial				Industrial
1	2017 Firm Coincident Peak CP %	33.03%		2018 Firm Coincident Peak CP %		24.85%
Line No.	Description	Reference	Estimated June 2019	Estimated July 2019	Estimated August 2019	Estimated September 2019
34	Total Reagents		\$ 2,279,328	\$ 3,177,248	\$ 3,131,075	\$ 2,379,370
35	Emission Allowances		337	517	513	348
36	Off-System Sales		(935)	(12,520)	(7,668)	(3,445)
37	Net Environmental Costs	Sum Lines 33 - 35	\$ 2,278,729	\$ 3,165,244	\$ 3,123,920	\$ 2,376,273
38	Total Projected System Sales kwhs w/solar	Exhibit 2	7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172
39	Environmental System Costs Incurred (¢ per Kwh)	Line 36 / Line 37* 100	0.0321	0.0389	0.0360	0.0292
40	Projected SC Retail Sales kWh	Exhibit 2	1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150
41	SC Environmental Costs	Line 38 * Line 39/ 100	\$ 559,297	\$ 766,641	\$ 765,050	\$ 593,186
42	Industrial Environmental Cost Allocated by Firm CP	Line 40 * Line 1	\$ 138,978	\$ 190,500	\$ 190,105	\$ 147,399
43	SC Projected Industrial kWh Sales		752,073,616	790,897,255	852,418,383	838,181,666
44	SC Industrial Environmental Cost Incurred (¢ per Kwh)	Line 41 / Line 42 * 100	0.0185	0.0241	0.0223	0.0176
45	SC Industrial Environmental Cost Billed (¢ per Kwh)	Company records	0.0168	0.0168	0.0168	0.0168
46	SC Industrial Environmental Costs (Over) / Under Recovery	(-Line 44 + Line 43) * Line 42 /100	\$ 12,630	\$ 57,630	\$ 46,899	\$ 6,584
47	Cumulative SC Industrial Environmental Costs (Over) / Under Recovery	Line 45 + PM Cum Bal	\$ (309,430)	\$ (251,800)	\$ (204,901)	\$ (198,317)
48	SC Projected Industrial Sales (October 2019 - September 2020)	Exhibit 3				9,171,268,692
49	SC Industrial Environmental Increment / (Decrement) (¢ per Kwh)	Line 46 / Line 47 * 100				(0.0022)

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**PROJECTED BILLING PERIOD ENVIRONMENTAL COSTS**  
**FOR THE 12 MONTHS OCTOBER 2019 TO SEPTEMBER 2020**

Line No.	Class	2018 Firm Coincident Peak (CP) KWs	CP %
1	Residential	2,055,870	51.25%
2	General Service / Lighting	958,783	23.90%
3	Industrial	996,792	24.85%
	Total SC	4,011,445	100.00%

Line No.	Description	Reference	October 2019	November 2019	December 2019	January 2020	February 2020	March 2020
4	Total Reagents		\$ 1,695,592	\$ 2,130,562	\$ 2,113,351	\$ 3,348,111	\$ 3,183,158	\$ 1,894,643
5	Emission Allowances		235	321	343	458	455	305
6	Estimated Off-system Sales		(2,884)	(4,956)	(3,832)	(95,750)	(73,185)	(8,091)
7	Net Environmental Costs	Sum Lines 4 - 6	\$ 1,692,944	\$ 2,125,927	\$ 2,109,862	\$ 3,252,819	\$ 3,110,428	\$ 1,886,858
8	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,803,214,198	6,495,662,262	7,186,884,482	7,903,467,722	7,808,874,524	7,353,013,933
9	Environmental System Costs Incurred (¢ per Kwh)	Line 7 / Line 8 *100	0.0249	0.0327	0.0294	0.0412	0.0398	0.0257
10	Projected SC Retail Sales kWh	Exhibit 3	1,706,250,685	1,621,069,330	1,752,297,794	1,903,104,027	1,905,467,334	1,823,372,113
11	SC Environmental Costs	Line 9 * Line 10 /100	\$ 424,591	\$ 530,550	\$ 514,424	\$ 783,258	\$ 758,985	\$ 467,896

Line No.	Description	Reference	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020	12 Month Total
12	Total Reagents		\$ 1,474,473	\$ 1,588,860	\$ 2,258,568	\$ 2,960,326	\$ 2,766,277	\$ 1,889,561	\$ 27,303,485
13	Emission Allowances		227	208	324	452	426	276	4,031
14	Estimated Off-system Sales		(654)	(2,907)	(2,618)	(13,228)	(4,874)	(1,663)	(214,642)
15	Net Environmental Costs	Sum Lines 12 - 14	\$ 1,474,046	\$ 1,586,161	\$ 2,256,274	\$ 2,947,551	\$ 2,761,830	\$ 1,888,174	\$ 27,092,874
16	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,672,124,994	6,463,555,894	7,048,447,873	8,241,762,239	8,635,074,609	8,178,560,496	88,790,643,227
17	Environmental System Costs Incurred (¢ per Kwh)	Line 15 / Line 16 *100	0.0221	0.0245	0.0320	0.0358	0.0320	0.0231	
18	Projected SC Retail Sales kWh	Exhibit 3	1,687,895,589	1,621,681,377	1,726,646,416	1,990,627,190	2,110,577,812	2,037,072,774	21,886,062,443
19	SC Environmental Costs	Line 17 * Line 18 /100	\$ 372,900	\$ 397,962	\$ 552,716	\$ 711,920	\$ 675,044	\$ 470,296	\$ 6,660,542
<b>SC Environmental Costs Allocated on Firm CP kW's</b>									
20	Residential	Total Line 19 * Line 1							\$ 3,413,535
21	General Service / Lighting	Total Line 19 * Line 2							\$ 1,591,949
22	Industrial	Total Line 19 * Line 3							\$ 1,655,058
23	Total SC	Sum Lines 20 through 22							\$ 6,660,542
<b>Projected SC Retail Sales kWh (October 2019 - September 2020)</b>									
24	Residential	Exhibit 3							6,728,320,673
25	General Service / Lighting	Exhibit 3							5,986,473,078
26	Industrial	Exhibit 3							9,171,268,692
27	Total SC	Sum Lines 24 through 26							21,886,062,443
<b>SC Enviromental Costs ¢/kWh</b>									
28	Residential	Line 20 / Line 24 * 100							0.0507
29	General Service / Lighting	Line 21 / Line 25 * 100							0.0266
30	Industrial	Line 22 / Line 26 * 100							0.0180

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - RESIDENTIAL**  
**ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019**

Line No.		Residential		Residential
1	2017 Firm Coincident Peak CP %	38.68%	2018 Firm Coincident Peak CP %	51.25%

  

Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018
2	Total PURPA Purchased Power Capacity Costs		\$ 2,213,593	\$ 6,677,009	\$ 6,553,797	\$ 4,333,985	\$ 2,785,778	\$ 1,113,419
3	Firm Natural Gas Transportation and Storage Costs		3,583,325	3,268,622	3,011,807	2,804,159	2,124,882	3,766,561
4	Total Capacity Related Costs	Line 2 + Line 3	\$ 5,796,918	\$ 9,945,631	\$ 9,565,603	\$ 7,138,145	\$ 4,910,660	\$ 4,879,980
5	Total System kWh Sales	Exhibit 2	7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955
6	Capacity Related System Costs Incurred (¢/kWh)	Line 4 / Line 5* 100	0.0725	0.1173	0.1158	0.0752	0.0775	0.0732
7	SC Retail Sales kWh	Exhibit 2	1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344
8	SC Capacity Related Cost Incurred	Line 6 * Line 7 / 100	\$ 1,420,819	\$ 2,336,759	\$ 2,327,852	\$ 1,841,148	\$ 1,146,875	\$ 1,195,658
9	Residential Capacity Related Cost Allocated by Firm CP	Line 8 * Line 1	\$ 551,865	\$ 907,629	\$ 904,169	\$ 712,191	\$ 443,633	\$ 462,503
10	SC Residential kWh Sales		609,213,656	685,061,515	638,545,237	696,736,494	491,727,445	435,458,622
11	SC Residential Capacity Related Cost Incurred (¢/kWh)	Line 9 / Line 10 * 100	0.0906	0.1325	0.1416	0.1022	0.0902	0.1062
12	SC Residential Billed (¢/kWh)	Company Records	0.1183	0.1183	0.1183	0.1183	0.1220	0.1274
13	SC Capacity Related (Over) / Under Recovery	(-Line 12 + Line 11)* Line 10 / 100	\$ (168,835)	\$ 97,201	\$ 148,770	\$ (112,048)	\$ (156,090)	\$ (92,070)
14	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	\$ (967,644)					
15	Accounting Adjustment(s)					\$ (9,703)	\$ 483	
16	Cumulative SC Residential Capacity Related (Over) / Under Recovery	Line 13 + Prior Month Cum Bal	\$ (1,136,479)	\$ (1,039,278)	\$ (890,508)	\$ (1,012,259)	\$ (1,167,865)	\$ (1,259,936)

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
17	Total PURPA Purchased Power Capacity Costs		\$ 965,775	\$ 1,276,118	\$ 1,480,302	\$ 1,190,304	\$ 1,342,185	\$ 1,317,666	\$ 31,249,932
18	Firm Natural Gas Transportation and Storage Costs		2,647,691	3,335,159	2,703,586	1,815,402	2,732,560	4,314,428	36,108,182
19	Total Capacity Related Costs	Line 17 + Line 18	\$ 3,613,466	\$ 4,611,277	\$ 4,183,888	\$ 3,005,706	\$ 4,074,745	\$ 5,632,094	\$ 67,358,114
20	Total System kWh Sales	Exhibit 2	7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
21	Capacity Related System Costs Incurred (¢/kWh)	Line 19 / Line 20* 100	0.0482	0.0610	0.0564	0.0462	0.0641	0.0839	
22	SC Retail Sales kWh	Exhibit 2	1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
23	SC Capacity Related Cost Incurred	Line 21 * Line 22 / 100	\$ 866,970	\$ 1,093,953	\$ 1,018,205	\$ 721,793	\$ 1,008,907	\$ 1,398,852	\$ 16,377,790
24	Residential PURPA Capacity Related Cost Allocated by Firm CP	Line 23 * Line 1	\$ 335,361	\$ 560,652	\$ 521,831	\$ 369,920	\$ 517,066	\$ 716,913	\$ 7,003,733
25	SC Residential kWh Sales		628,501,539	657,177,943	610,321,704	480,884,048	414,875,999	447,612,785	6,796,116,987
26	SC Residential Capacity Related Cost Incurred (¢/kWh)	Line 24 / Line 25 * 100	0.0534	0.0853	0.0855	0.0769	0.1246	0.1602	
27	SC Residential Billed (¢/kWh)	Company Records	0.1274	0.1274	0.1274	0.1274	0.1274	0.1274	
28	SC Capacity Related (Over) / Under Recovery	(-Line 27 + Line 26)*Line 25 / 100	\$ (465,350)	\$ (276,593)	\$ (255,719)	\$ (242,726)	\$ (11,486)	\$ 146,654	\$ (1,388,292)
29	Accounting Adjustment(s)								\$ (9,220)
30	Cumulative SC Residential Capacity Related (Over) / Under Recovery	Line 28 + Line 29 + PM Cum Bal	\$ (1,725,286)	\$ (2,001,880)	\$ (2,257,598)	\$ (2,500,324)	\$ (2,511,810)	\$ (2,365,156)	\$ (2,365,156)

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - RESIDENTIAL  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.		Residential				Residential
1	2017 Firm Coincident Peak CP %	38.68%			2018 Firm Coincident Peak CP %	51.25%
Line No.	Description	Reference	Estimated June 2019	Estimated July 2019	Estimated August 2019	Estimated September 2019
31	Total PURPA Purchased Power Capacity Costs		\$ 2,628,938	\$ 3,620,857	\$ 3,550,928	\$ 2,060,772
32	Firm Natural Gas Transportation and Storage Costs		5,353,401	5,306,253	5,310,713	4,959,395
33	Total Capacity Related Costs	Line 29 + Line 30	\$ 7,982,338	\$ 8,927,111	\$ 8,861,642	\$ 7,020,168
34	Total System kWh Sales	Exhibit 2	7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172
35	Capacity Related System Costs Incurred (¢/kWh)	Line 31 / Line 32* 100	0.1125	0.1098	0.1021	0.0864
36	SC Retail Sales kWh	Exhibit 2	1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150
37	SC Capacity Related Cost Incurred	Line 33 * Line 34 / 100	\$ 1,959,206	\$ 2,162,200	\$ 2,170,221	\$ 1,752,434
38	Residential Capacity Related Cost Allocated by Firm CP	Line 35 * Line 1	\$ 1,004,095	\$ 1,108,130	\$ 1,112,241	\$ 898,124
39	SC Projected Residential kWh Sales		486,895,816	619,213,465	687,169,454	628,981,205
40	SC Residential Capacity Related Cost Incurred (¢/kWh)	Line 36 / Line 37 * 100	0.2062	0.1790	0.1619	0.1428
41	SC Residential Billed (¢/kWh)	Docket No. 2017-3-E	0.1274	0.1274	0.1274	0.1274
42	SC Capacity Related (Over) / Under Recovery	(-Line 39 + Line 38)*Line 37 /100	\$ 383,790	\$ 319,252	\$ 236,787	\$ 96,802
43	Cumulative SC Residential Capacity Related (Over) / Under Recovery	Line 40 + Prior Month Cum Bal	\$ (1,981,366)	\$ (1,662,114)	\$ (1,425,328)	\$ (1,328,525)
44	SC Projected Residential Sales (October 2019-September 2020)	Exhibit 3				6,728,320,673
45	SC Residential Capacity Related Increment / (Decrement) (¢/kWh)	Line 41 / Line 42* 100				(0.0197)

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - GENERAL SERVICE/ LIGHTING**  
**ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019**

Line No.			General Service / Lighting				General Service / Lighting			
1		2017 Firm Coincident Peak CP %	28.28%				2018 Firm Coincident Peak CP % 23.90%			
Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018		
2	Total PURPA Purchased Power Capacity Costs		\$ 2,213,593	\$ 6,677,009	\$ 6,553,797	\$ 4,333,985	\$ 2,785,778	\$ 1,113,419		
3	Firm Natural Gas Transportation and Storage Costs		\$ 3,583,325	\$ 3,268,622	\$ 3,011,807	\$ 2,804,159	\$ 2,124,882	\$ 3,766,561		
4	Total Capacity Related Costs	Line 2 + Line 3	\$ 5,796,918	\$ 9,945,631	\$ 9,565,603	\$ 7,138,145	\$ 4,910,660	\$ 4,879,980		
5	Total System kWh Sales	Exhibit 2	7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955		
6	Capacity Related System Costs Incurred (¢/kWh)	Line 4 / Line 5* 100	0.0725	0.1173	0.1158	0.0752	0.0775	0.0732		
7	SC Retail Sales kWh	Exhibit 2	1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344		
8	SC Capacity Related Cost Incurred	Line 6 * Line 7 / 100	\$ 1,420,819	\$ 2,336,759	\$ 2,327,852	\$ 1,841,148	\$ 1,146,875	\$ 1,195,658		
9	General Service / Lighting Capacity Related Cost Allocated by Firm CP	Line 8 * Line 1	\$ 400,975	\$ 659,466	\$ 656,953	\$ 520,740	\$ 324,376	\$ 338,173		
10	SC General Service / Lighting kWh Sales		532,609,815	555,007,748	534,768,585	608,217,191	471,984,556	426,666,805		
11	SC General Service / Lighting Capacity Related Cost Incurred (¢/kWh)	Line 9 / Line 10 * 100	0.0753	0.1188	0.1228	0.0856	0.0687	0.0793		
12	SC General Service / Lighting Billed (¢/kWh)	Company Records	0.0959	0.0959	0.0959	0.0959	0.1039	0.1157		
13	SC Capacity Related (Over) / Under Recovery	(-Line 12 + Line 11)* Line 10 / 100	\$ (109,798)	\$ 127,214	\$ 144,110	\$ (62,540)	\$ (166,058)	\$ (155,477)		
14	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	\$ (11,852)							
15	Accounting Adjustment(s)					\$ 3,775	\$ 353			
16	Cumulative SC General Service / Lighting Capacity Related (Over) / Under Recovery	Line 13 + Prior Month Cum Bal	\$ (121,650)	\$ 5,564	\$ 149,674	\$ 90,909	\$ (74,795)	\$ (230,272)		

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
17	Total PURPA Purchased Power Capacity Costs		\$ 965,775	\$ 1,276,118	\$ 1,480,302	\$ 1,190,304	\$ 1,342,185	\$ 1,317,666	\$ 31,249,932
18	Firm Natural Gas Transportation and Storage Costs		\$ 2,647,691	\$ 3,335,159	\$ 2,703,586	\$ 1,815,402	\$ 2,732,560	\$ 4,314,428	\$ 36,108,182
19	Total Capacity Related Costs	Line 17 + Line 18	\$ 3,613,466	\$ 4,611,277	\$ 4,183,888	\$ 3,005,706	\$ 4,074,745	\$ 5,632,094	\$ 67,358,114
20	Total System kWh Sales	Exhibit 2	7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
21	Capacity Related System Costs Incurred (¢/kWh)	Line 19 / Line 20* 100	0.0482	0.0610	0.0564	0.0462	0.0641	0.0839	
22	SC Retail Sales kWh	Exhibit 2	1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
23	SC Capacity Related Cost Incurred	Line 21 * Line 22 / 100	\$ 866,970	\$ 1,093,952	\$ 1,018,205	\$ 721,794	\$ 1,008,908	\$ 1,398,852	\$ 16,377,791
24	General Service / Lighting Capacity Related Cost Allocated by Firm CP	Line 23 * Line 1	\$ 245,209	\$ 261,468	\$ 243,363	\$ 172,517	\$ 241,141	\$ 334,342	\$ 4,398,723
25	SC General Service / Lighting kWh Sales		445,252,198	455,887,041	446,297,147	406,630,406	413,949,578	461,349,327	5,758,620,397
26	SC General Service / Lighting Capacity Related Cost Incurred (¢/kWh)	Line 24 / Line 25 * 100	0.0551	0.0574	0.0545	0.0424	0.0583	0.0725	
27	SC General Service / Lighting Billed (¢/kWh)	Company Records	0.1158	0.1158	0.1158	0.1158	0.1158	0.1158	
28	SC Capacity Related (Over) / Under Recovery	(-Line 27 + Line 26)*Line 25 / 100	\$ (270,393)	\$ (266,449)	\$ (273,449)	\$ (298,361)	\$ (238,213)	\$ (199,901)	\$ (1,769,314)
29	Accounting Adjustment(s)								
30	Cumulative SC General Service / Lighting Capacity Related (Over) / Under Recovery	Line 28 + Line 29 + PM Cum Bal	\$ (500,665)	\$ (767,114)	\$ (1,040,563)	\$ (1,338,923)	\$ (1,577,136)	\$ (1,777,037)	\$ (1,777,038)

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - GENERAL SERVICE/ LIGHTING  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.		General Service / Lighting		General Service / Lighting			
1	2017 Firm Coincident Peak CP %	28.28%		2018 Firm Coincident Peak CP %	23.90%		
			<i>Estimated June 2019</i>	<i>Estimated July 2019</i>	<i>Estimated August 2019</i>	<i>Estimated September 2019</i>	
Line No.	Description	Reference					
31	Total PURPA Purchased Power Capacity Costs		\$ 2,628,938	\$ 3,620,857	\$ 3,550,928	\$ 2,060,772	
32	Firm Natural Gas Transportation and Storage Costs		\$ 5,353,401	\$ 5,306,253	\$ 5,310,713	\$ 4,959,395	
33	Total Capacity Related Costs	Line 29 + Line 30	\$ 7,982,338	\$ 8,927,111	\$ 8,861,642	\$ 7,020,168	
34	Total System kWh Sales	Exhibit 2	7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172	
35	Capacity Related System Costs Incurred (¢/kWh)	Line 31 / Line 32 * 100	0.1125	0.1098	0.1021	0.0864	
36	SC Retail Sales kWh	Exhibit 2	1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150	
37	SC Capacity Related Cost Incurred	Line 33 * Line 34 / 100	\$ 1,959,206	\$ 2,162,200	\$ 2,170,221	\$ 1,752,434	
38	General Service / Lighting Capacity Related Cost Allocated by Firm CP	Line 35 * Line 1	\$ 468,274	\$ 516,792	\$ 518,709	\$ 418,853	
39	SC General Service / Lighting kWh Sales		503,131,126	558,701,811	586,229,211	562,074,280	
40	SC General Service / Lighting Capacity Related Cost Incurred (¢/kWh)	Line 36 / Line 37 * 100	0.0931	0.0925	0.0885	0.0745	
41	SC General Service / Lighting Billed (¢/kWh)	Docket No. 2017-3-E	0.1158	0.1158	0.1158	0.1158	
42	SC Capacity Related (Over) / Under Recovery	(-Line 39 + Line 38)*Line 37 /100	\$ (114,352)	\$ (130,185)	\$ (160,145)	\$ (232,029)	
43	Cumulative SC General Service / Lighting Capacity Related (Over) / Under Recovery	Line 40 + Prior Month Cum Bal	\$ (1,891,390)	\$ (2,021,575)	\$ (2,181,720)	\$ (2,413,749)	
44	SC Projected General Service / Lighting Sales (October 2019 - September 2020)	Exhibit 3				5,986,473,078	
45	SC General Service / Lighting Capacity Related Increment / (Decrement) (¢/kWh)	Line 41 / Line 42 * 100				(0.0403)	



**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - INDUSTRIAL**  
**ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019**

Line No.		Industrial		Industrial
1	2017 Firm Coincident Peak CP %	33.03%	2018 Firm Coincident Peak CP %	24.85%

  

Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018
2	Total PURPA Purchased Power Capacity Costs		\$ 2,213,593	\$ 6,677,009	\$ 6,553,797	\$ 4,333,985	\$ 2,785,778	\$ 1,113,419
3	Firm Natural Gas Transportation and Storage Costs		3,583,325	3,268,622	\$ 3,011,807	\$ 2,804,159	\$ 2,124,882	\$ 3,766,561
4	Total Capacity Related Costs	Line 2 + Line 3	\$ 5,796,918	\$ 9,945,631	\$ 9,565,603	\$ 7,138,145	\$ 4,910,660	\$ 4,879,980
5	Total System kWh Sales	Exhibit 2	7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955
6	Capacity Related Costs Incurred (¢/kWh)	Line 4 / Line 5* 100	0.0725	0.1173	0.1158	0.0752	0.0775	0.0732
7	SC Retail Sales kWh	Exhibit 2	1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344
8	SC Capacity Related Cost Incurred	Line 6 * Line 7 / 100	\$ 1,420,819	\$ 2,336,759	\$ 2,327,852	\$ 1,841,148	\$ 1,146,875	\$ 1,195,658
9	Industrial Capacity Related Cost Allocated by Firm CP	Line 8 * Line 1	\$ 467,979	\$ 769,664	\$ 766,730	\$ 608,217	\$ 378,866	\$ 394,981
10	SC Industrial kWh Sales		818,919,911	751,671,822	836,295,956	1,144,811,435	515,774,529	772,310,917
11	SC Industrial Capacity Related Cost Incurred (¢/kWh)	Line 9 / Line 10 * 100	0.0571	0.1024	0.0917	0.0531	0.0735	0.0511
12	SC Industrial Billed (¢/kWh)	Company Records	0.0623	0.0623	0.0623	0.0623	0.0735	0.0900
13	SC Capacity Related (Over) / Under Recovery	(-Line 12 + Line 11)* Line 10 / 100	\$ (42,208)	\$ 301,372	\$ 245,718	\$ (105,001)	\$ (168)	\$ (299,783)
14	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	\$ 68,866					
15	Accounting Adjustment(s)					\$ 5,928	\$ 413	
16	Cumulative SC Industrial Capacity Related (Over) / Under Recovery	Line 13 + Prior Month Cum Bal	\$ 26,658	\$ 328,030	\$ 573,748	\$ 474,675	\$ 474,920	\$ 175,137

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
17	Total PURPA Purchased Power Capacity Costs		\$ 965,775	\$ 1,276,118	\$ 1,480,302	\$ 1,190,304	\$ 1,342,185	\$ 1,317,666	\$ 31,249,932
18	Firm Natural Gas Transportation and Storage Costs		\$ 2,647,691	\$ 3,335,159	\$ 2,703,586	\$ 1,815,402	\$ 2,732,560	\$ 4,314,428	\$ 36,108,182
19	Total Capacity Related Costs	Line 17 + Line 18	\$ 3,613,466	\$ 4,611,277	\$ 4,183,888	\$ 3,005,706	\$ 4,074,745	\$ 5,632,094	\$ 67,358,114
20	Total System kWh Sales	Exhibit 2	7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
21	Capacity Related Costs Incurred (¢/kWh)	Line 19 / Line 20* 100	0.0482	0.0610	0.0564	0.0462	0.0641	0.0839	
22	SC Retail Sales kWh	Exhibit 2	1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
23	SC Capacity Related Cost Incurred	Line 21 * Line 22 / 100	\$ 866,970	\$ 1,093,952	\$ 1,018,205	\$ 721,794	\$ 1,008,908	\$ 1,398,852	\$ 16,377,791
24	Industrial Capacity Related Cost Allocated by Firm CP	Line 23 * Line 1	\$ 286,401	\$ 271,833	\$ 253,011	\$ 179,356	\$ 250,700	\$ 347,597	\$ 4,975,335
25	SC Industrial kWh Sales		723,406,024	680,482,372	749,157,486	676,050,495	745,070,091	759,002,100	9,172,953,138
26	SC Industrial Capacity Related Cost Incurred (¢/kWh)	Line 24 / Line 25 * 100	0.0396	0.0399	0.0338	0.0265	0.0336	0.0458	
27	SC Industrial Billed (¢/kWh)	Company Records	0.0901	0.0901	0.0901	0.0901	0.0901	0.0901	
28	SC Capacity Related (Over) / Under Recovery	(-Line 27 + Line 26)*Line 25 / 100	\$ (365,388)	\$ (341,282)	\$ (421,980)	\$ (429,765)	\$ (420,608)	\$ (336,264)	\$ (2,215,357)
29	Accounting Adjustment(s)								\$ 6,341
30	Cumulative SC Industrial Capacity Related (Over) / Under Recovery	Line 28 + Line 29 + PM Cum Bal	\$ (190,251)	\$ (531,533)	\$ (953,513)	\$ (1,383,278)	\$ (1,803,886)	\$ (2,140,150)	\$ (2,140,150)

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF CAPACITY RELATED COSTS (OVER) / UNDER RECOVERY - INDUSTRIAL  
ACTUAL AND ESTIMATED COSTS AND REVENUES FOR JUNE 2018 - SEPTEMBER 2019

Line No.			Industrial			Industrial
1	2017 Firm Coincident Peak CP %		33.03%		2018 Firm Coincident Peak CP %	24.85%
			Estimated June 2019	Estimated July 2019	Estimated August 2019	Estimated September 2019
Line No.	Description	Reference				
31	Total PURPA Purchased Power Capacity Costs		\$ 2,628,938	\$ 3,620,857	\$ 3,550,928	\$ 2,060,772
32	Firm Natural Gas Transportation and Storage Costs		5,353,401	5,306,253	5,310,713	4,959,395
33	Total Capacity Related Costs	Line 29 + Line 30	\$ 7,982,338	\$ 8,927,111	\$ 8,861,642	\$ 7,020,168
34	Total System kWh Sales	Exhibit 2	7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172
35	Capacity Related Costs Incurred (¢/kWh)	Line 31 / Line 32* 100	0.1125	0.1098	0.1021	0.0864
36	SC Retail Sales kWh	Exhibit 2	1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150
37	SC Capacity Related Cost Incurred	Line 33 * Line 34 / 100	\$ 1,959,206	\$ 2,162,200	\$ 2,170,221	\$ 1,752,434
38	Industrial Capacity Related Cost Allocated by Firm CP	Line 35 * Line 1	\$ 486,837	\$ 537,279	\$ 539,272	\$ 435,457
39	SC Projected Industrial kWh Sales		752,073,616	790,897,255	852,418,383	838,181,666
40	SC Industrial Capacity Related Cost Incurred (¢/kWh)	Line 36 / Line 37 * 100	0.0647	0.0679	0.0633	0.0520
41	SC Industrial Billed (¢/kWh)	Docket No. 2017-3-E	0.0901	0.0901	0.0901	0.0901
42	SC Capacity Related (Over) / Under Recovery	(-Line 39 + Line 38)*Line 37 /100	\$ (190,781)	\$ (175,320)	\$ (228,757)	\$ (319,745)
43	Cumulative SC Industrial Capacity Related (Over) / Under Recovery	Line 40 + Prior Month Cum Bal	\$ (2,330,931)	\$ (2,506,251)	\$ (2,735,008)	\$ (3,054,753)
44	SC Projected Industrial Sales (October 2019 - September 2020)	Exhibit 3				9,171,268,692
45	SC Industrial Capacity Related Increment / (Decrement) (¢/kWh)	Line 41 / Line 42* 100				(0.0333)

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**PROJECTED BILLING PERIOD CAPACITY RELATED COSTS**  
**FOR THE 12 MONTHS OCTOBER 2019 TO SEPTEMBER 2020**

Line No.	Class	2018 Firm Coincident Peak (CP) KWs	CP %
1	Residential	2,055,870	51.25%
2	General Service / Lighting	958,783	23.90%
3	Industrial	996,792	24.85%
	Total SC	4,011,445	100.00%

Line No.	Description	Reference	October 2019	November 2019	December 2019	January 2020	February 2020	March 2020
4	Total PURPA Purchased Power Capacity Costs		\$ 1,739,948	\$ 1,559,595	\$ 1,487,991	\$ 1,757,559	\$ 1,946,066	\$ 2,076,841
5	Firm Natural Gas Transportation and Storage Costs		4,396,400	4,950,316	5,518,788	6,130,293	6,185,346	5,428,557
6	Total Capacity Costs	Line 4 + Line 5	\$ 6,136,348	\$ 6,509,911	\$ 7,006,778	\$ 7,887,852	\$ 8,131,412	\$ 7,505,398
7	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,803,214,198	6,495,662,262	7,186,884,482	7,903,467,722	7,808,874,524	7,353,013,933
8	Capacity Related System Costs Incurred (¢/Kwh)	Line 6 / Line 7 *100	0.0902	0.1002	0.0975	0.0998	0.1041	0.1021
9	Projected SC Retail Sales kWh	Exhibit 3	1,706,250,685	1,621,069,330	1,752,297,794	1,903,104,027	1,905,467,334	1,823,372,113
10	SC Capacity Related Costs Incurred	Line 8 * Line 9 /100	\$ 1,539,000	\$ 1,624,625	\$ 1,708,385	\$ 1,899,344	\$ 1,984,171	\$ 1,861,160

Line No.	Description	Reference	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020	12 Month Total
11	Total PURPA Purchased Power Capacity Costs		\$ 2,276,355	\$ 2,470,783	\$ 3,088,250	\$ 4,083,329	\$ 3,951,638	\$ 2,428,006	\$ 28,866,361
12	Firm Natural Gas Transportation and Storage Costs		6,920,985	7,768,984	7,252,281	7,366,575	7,386,796	7,417,830	76,723,150
13	Total Capacity Costs	Line 11 + Line 12	\$ 9,197,340	\$ 10,239,768	\$ 10,340,531	\$ 11,449,904	\$ 11,338,434	\$ 9,845,836	\$ 105,589,512
14	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,672,124,994	6,463,555,894	7,048,447,873	8,241,762,239	8,635,074,609	8,178,560,496	88,790,643,227
15	Capacity Related System Costs Incurred (¢/Kwh)	Line 13 / Line 14 *100	0.1378	0.1584	0.1467	0.1389	0.1313	0.1204	
16	Projected SC Retail Sales kWh	Exhibit 3	1,687,895,589	1,621,681,377	1,726,646,416	1,990,627,190	2,110,577,812	2,037,072,774	21,886,062,443
17	SC Capacity Related Costs Incurred	Line 15 * Line 16 /100	\$ 2,326,717	\$ 2,569,118	\$ 2,533,102	\$ 2,765,487	\$ 2,771,331	\$ 2,452,349	\$ 26,034,790
<b>SC Capacity Related Costs Allocated on Firm CP kW's</b>									
18	Residential	Total Line 17 * Line 1							\$ 13,342,858
19	General Service / Lighting	Total Line 17 * Line 2							\$ 6,222,624
20	Industrial	Total Line 17 * Line 3							\$ 6,469,307
21	Total SC	Sum Lines 18 through 20							\$ 26,034,790
<b>Projected SC Retail Sales kWh (October 2019 - September 2020)</b>									
22	Residential	Exhibit 3							6,728,320,673
23	General Service / Lighting	Exhibit 3							5,986,473,078
24	Industrial	Exhibit 3							9,171,268,692
25	Total SC	Sum Lines 22 through 24							21,886,062,443
<b>SC Capacity Related Costs ¢/kWh</b>									
26	Residential	Line 18 / Line 22 * 100							0.1983
27	General Service / Lighting	Line 19 / Line 23 * 100							0.1039
28	Industrial	Line 20 / Line 24 * 100							0.0705

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**ACTUAL AND ESTIMATED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COSTS**  
**FOR THE PERIOD JUNE 2018 - SEPTEMBER 2019**

Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018
	<b><u>DERP Incremental Costs</u></b>							
1	Purchased Power Agreements		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	DERP NEM Incentive		264,771	272,870	285,145	292,579	315,749	322,425
3	Solar Rebate Program - Amortization		228,110	228,484	238,288	244,772	244,788	244,856
4	Solar Rebate Program - Carrying Costs		223,833	222,904	226,966	233,911	233,473	232,088
5	Shared Solar Program		-	-				-
6	NEM Avoided Capacity Costs		33,811	34,448	35,483	36,153	36,380	36,825
7	NEM Meter Costs		42,882	44,087	45,829	46,932	54,006	55,712
8	General and Administrative Expenses		31,505	39,400	34,024	24,586	21,397	23,957
9	Interest on capped Industrial undercollection						471	448
10	Total DERP Incremental Costs	Sum Lines 1 - 9	\$ 824,912	\$ 842,193	\$ 865,734	\$ 878,934	\$ 906,264	\$ 916,311
11	Revenue Collected	Company Record	\$ 308,530	\$ 307,025	\$ 307,543	\$ 310,532	\$ 610,097	\$ 915,558
12	SC DERP Incremental (Over)/Under Recovery	Line 10 - Line 11	\$ 516,382	\$ 535,168	\$ 558,191	\$ 568,402	\$ 296,167	\$ 753
13	(Over)/Under Cumulative Balance-May 2018	Prior Year annual filing	\$ (966,265)					
14	Adjustments					\$ (49,569)		
15	Cumulative SC DERP Incremental (Over)/ Under Recovery	PM Cum bal + Line 12 + Line 14	\$ (449,883)	\$ 85,285	\$ 643,476	\$ 1,162,309	\$ 1,458,476	\$ 1,459,229

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2019
	<b><u>DERP Incremental Costs</u></b>								
16	Purchased Power Agreements		\$ -	\$ -	\$ -	\$ 10,980	\$ 2,938	\$ 1,372	\$ 15,290
17	DERP NEM Incentive		326,530	334,168	\$ 336,848	\$ 339,100	341,751	345,950	3,777,886
18	Solar Rebate Program - Amortization		244,839	250,339	\$ 250,339	\$ 253,866	(1,459,065)	9,191	978,806
19	Solar Rebate Program - Carrying Costs		230,685	232,109	\$ 233,573	\$ 233,964	234,335	232,869	2,770,711
20	Shared Solar Program		-		\$ -		6,215	21,739	27,955
21	NEM Avoided Capacity Costs		37,070	35,226	\$ 35,427	\$ 35,680	35,853	36,218	428,573
22	NEM Meter Costs		56,211	57,058	\$ 57,481	\$ 57,883	58,264	58,906	635,250
23	General and Administrative Expenses		29,306	(29,218)	\$ (86,863)	\$ 7,916	44,406	27,894	168,309
24	Interest on capped Industrial undercollection		\$ 448	174	140	398	-	76	2,155
25	Total DERP Incremental Costs	Sum Lines 16 - 24	\$ 925,089	\$ 879,856	\$ 826,946	\$ 939,787	\$ (735,304)	\$ 734,216	\$ 8,804,937
26	Revenue Collected	Company Record	\$ 912,704	\$ 919,094	\$ 914,455	\$ 917,852	\$ 917,848	\$ 921,942	\$ 8,263,180
27	SC DERP Incremental (Over)/Under Recovery	Line 25 - Line 26	\$ 12,385	\$ (39,238)	\$ (87,509)	\$ 21,935	\$ (1,653,152)	\$ (187,727)	\$ 541,757
28	Adjustments						\$ 10	\$ (191)	\$ (49,750)
29	Cumulative SC DERP Incremental (Over)/ Under Recovery	PM Cum bal + Line 27 + Line 28	\$ 1,471,614	\$ 1,432,376	\$ 1,344,868	\$ 1,366,803	\$ (286,339)	\$ (474,257)	\$ (474,257)

Note (1) Adjustments represent prior period adjustments reflected in the monthly Schedule 4 filings.

Note (2) Totals may not add due to rounding

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
ACTUAL AND ESTIMATED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COSTS  
FOR THE PERIOD JUNE 2018 - SEPTEMBER 2019

Line No.	Description	Reference	Estimated June 2019	Estimated July 2019	Estimated August 2019	Estimated September 2019	Estimated 4 months ended Sept 2019
<b>DERP Incremental Costs</b>							
30	Purchased Power Agreements		\$ -	\$ -	\$ -	\$ -	\$ -
31	DERP NEM Incentive		483,289	466,167	421,063	389,373	1,759,892
32	Solar Rebate Program - Amortization		9,191	12,820	12,820	12,820	47,650
33	Solar Rebate Program - Carrying Costs		8,930	10,684	12,418	12,347	44,378
34	Shared Solar Program		5,023	5,023	5,023	5,023	20,091
35	NEM Avoided Capacity Costs		48,135	49,327	50,179	51,032	198,674
36	NEM Meter Costs		62,647	63,587	64,512	65,438	256,184
37	General and Administrative Expenses		79,789	79,789	79,789	79,789	319,157
38	Interest on capped Industrial undercollection		30	26	5	-	62
39	<b>Total DERP Incremental Costs</b>	Sum Lines 30 - 38	\$ 697,035	\$ 687,422	\$ 645,809	\$ 615,821	\$ 2,646,088
40	Estimated Revenue Collected		\$ 907,141	\$ 907,645	\$ 908,167	\$ 908,711	\$ 3,631,665
41	SC DERP Incremental (Over)/Under Recovery	Line 39 - Line 40	\$ (210,105)	\$ (220,223)	\$ (262,358)	\$ (292,890)	\$ (985,577)
42	Adjustments						
43	Cumulative SC DERP Incremental (Over)/ Under Recovery	PM Cum bal + Line 41 + Line 42	\$ (684,363)	\$ (904,586)	\$ (1,166,944)	\$ (1,459,834)	\$ (1,459,834)

Note (1) Totals may not add due to rounding

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF DERP INCREMENTAL COSTS (OVER)/UNDER RECOVERY  
FOR THE PERIOD JUNE 2018 - SEPTEMBER 2019

		June 2018 through September 2019
1 Cumulative DERP Incremental (Over)/ Under Recovery Balance	Exhibit 8 Line 43	\$ (1,459,834)

	Firm Peak Demand - 2018	June 2018 through September 2019	(Over)/Under Recovery Allocated per Firm Peak Demand
Allocation of DERP Incremental (Over)/Under Recovery			
2 Residential	51.25%		\$ (748,167)
3 General	23.90%		(348,918)
4 Industrial	24.85%		(362,750)
5 Total	100.00%	\$ (1,459,834)	\$ (1,459,834)

	(Over)/Under Recovery Allocated per Firm Peak Demand	Projected Number of Accounts in Billing Period	\$ per Account per Year	\$ per Account per Month
6 Residential	\$ (748,167)	496,576	\$ (1.51)	\$ (0.13)
7 General	(348,918)	73,287	\$ (4.76)	\$ (0.40)
8 Industrial	(362,750)	1,575	\$ (230.32)	\$ (19.19)
9 Total	\$ (1,459,834)	571,438		

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
PROJECTED DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COSTS  
FOR THE 12 MONTHS OCTOBER 2019 TO SEPTEMBER 2020

Line No.	Description	Reference	October 2019	November 2019	December 2019	January 2020	February 2020	March 2020
<b>DERP Incremental Costs</b>								
1	Purchased Power Agreements		\$ -	\$ -	\$ 21,169	\$ 30,682	\$ 34,108	\$ 34,108
2	DERP NEM Incentive		\$ 441,141	\$ 319,096	\$ 252,336	\$ 359,671	\$ 406,996	\$ 484,315
3	Solar Rebate Program - Amortization		\$ 12,820	\$ 12,820	\$ 20,343	\$ 20,343	\$ 20,343	\$ 20,343
4	Solar Rebate Program - Carrying Costs		\$ 12,276	\$ 12,205	\$ 15,877	\$ 19,507	\$ 19,394	\$ 19,282
5	Shared Solar Program		\$ 4,928	\$ 4,928	\$ 4,928	\$ 4,928	\$ 4,928	\$ 4,928
6	NEM Avoided Capacity Costs		\$ 44,144	\$ 44,863	\$ 46,216	\$ 47,001	\$ 47,728	\$ 47,857
7	NEM Meter Costs		\$ 66,363	\$ 67,293	\$ 68,238	\$ 69,182	\$ 70,127	\$ 71,076
8	General and Administrative Expenses		\$ 79,789	\$ 79,789	\$ 79,789	\$ 42,340	\$ 42,340	\$ 42,340
9	<b>Total DERP Incremental Costs</b>	Sum Lines 1 - 9	<b>\$ 661,461</b>	<b>\$ 540,995</b>	<b>\$ 508,895</b>	<b>\$ 593,653</b>	<b>\$ 645,963</b>	<b>\$ 724,249</b>

Line No.	Description	Reference	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020	12 Month Total
<b>DERP Incremental Costs</b>									
10	Purchased Power Agreements		\$ 34,108	\$ 34,108	\$ 34,108	\$ 36,816	\$ 36,816	\$ 43,824	\$ 339,845
11	DERP NEM Incentive		614,650	\$ 610,920	\$ 623,883	\$ 590,138	\$ 523,529	\$ 474,323	5,700,999
12	Solar Rebate Program - Amortization		20,343	\$ 20,343	\$ 27,542	\$ 27,542	\$ 27,542	\$ 30,090	260,409
13	Solar Rebate Program - Carrying Costs		19,169	\$ 19,057	\$ 22,526	\$ 25,955	\$ 25,802	\$ 26,918	237,968
14	Shared Solar Program		4,928	\$ 4,928	\$ 4,928	\$ 4,928	\$ 4,928	\$ 4,928	59,137
15	NEM Avoided Capacity Costs		47,857	\$ 47,857	\$ 47,857	\$ 47,857	\$ 47,857	\$ 47,857	564,952
16	NEM Meter Costs		72,031	\$ 72,990	\$ 73,964	\$ 74,942	\$ 75,926	\$ 76,923	859,054
17	General and Administrative Expenses		42,340	\$ 42,340	\$ 42,340	\$ 42,340	\$ 42,340	\$ 42,340	620,429
18	<b>Total DERP Incremental Costs</b>	Sum Lines 10 - 17	<b>\$ 855,426</b>	<b>\$ 852,542</b>	<b>\$ 877,147</b>	<b>\$ 850,518</b>	<b>\$ 784,740</b>	<b>\$ 747,204</b>	<b>\$ 8,642,793</b>

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF DERP PROJECTED BILLING PERIOD COST FACTORS  
FOR THE PERIOD OCTOBER 2019 - SEPTEMBER 2020

		October 2019 through September 2020			
1 Total DERP Projected Incremental Costs		Exhibit 10 Line 18	\$ 8,642,793		
Allocation of DERP Incremental Costs		Firm Peak Demand - 2018	October 2019 through September 2020	Cost Allocated per Firm Peak Demand	
2 Residential		51.25%		\$ 4,429,441	
3 General		23.90%		2,065,730	
4 Industrial		24.85%		2,147,622	
5 Total		100.00%	\$ 8,642,793	\$ 8,642,793	
		Total Cost Allocated per Firm Peak Demand	Projected Number of Accounts in Billing Period	\$ per Account per Year	\$ per Account per Month
6 Residential		\$ 4,429,441	496,576	\$ 8.92	\$ 0.74
7 General		2,065,730	73,287	\$ 28.19	\$ 2.35
8 Industrial		2,147,622	1,575	\$ 1,363.57	\$ 113.63
9 Total		\$ 8,642,793	571,438		



**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - RESIDENTIAL**  
**ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019**

Line No.		Residential		Residential
1	2017 Firm Coincident Peak CP %	38.68%		2018 Firm Coincident Peak CP % 51.25%

  

Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018
2	Purchased Power Agreements		\$ 284	\$ 309	\$ 518	\$ 286	\$ 389	\$ 176
3	Shared Solar Program		-	-	-	-	-	-
4	<b>Total DERP Avoided Costs</b>	Line 2 + Line 3	\$ 284	\$ 309	\$ 518	\$ 286	\$ 389	\$ 176
5	Total System kWh Sales	Exhibit 2	7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955
6	DERP Avoided System Cost - (¢/kWh)	Line 4 / Line 5* 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	SC Retail Sales kWh	Exhibit 2	1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344
8	SC DERP Avoided Costs	Line 6 * Line 7 / 100	\$ 70	\$ 73	\$ 125	\$ 74	\$ 91	\$ 43
9	Residential DERP Avoided Costs Allocated by Firm CP	Line 8 * Line 1	\$ 27	\$ 28	\$ 48	\$ 29	\$ 35	\$ 17
10	SC Residential kWh Sales		609,213,656	685,061,515	638,545,237	696,736,494	491,727,445	435,458,622
11	SC Residential DERP Avoided Cost (¢/kWh)	Line 9 / Line 10 * 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	SC Residential Rate Billed (¢/kWh)	Company Records	(0.0015)	(0.0015)	(0.0015)	(0.0015)	(0.0007)	0.0006
13	SC DERP Avoided Cost (Over) / Under Recovery	( Line 11 - Line 12 ) * Line 10 / 100	\$ 9,165	\$ 10,304	\$ 9,627	\$ 10,480	\$ 3,255	\$ (2,549)
14	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	\$ (26,775)					
15	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 13 + PM Cum Bal	\$ (17,610)	\$ (7,305)	\$ 2,322	\$ 12,802	\$ 16,057	\$ 13,509

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
16	Purchased Power Agreements		\$ 149	\$ 133	\$ 18,720	\$ 36,552	\$ 23,863	\$ 3,960	\$ 85,341
17	Shared Solar Program		-	-	-	-	15,982	24,918	40,901
18	<b>Total DERP Avoided Costs</b>	Line 16 + Line 17	\$ 149	\$ 133	\$ 18,720	\$ 36,552	\$ 39,846	\$ 28,879	\$ 126,243
19	Total System kWh Sales	Exhibit 2	7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
20	DERP Avoided System Cost - (¢/kWh)	Line 18 / Line 19* 100	0.0000	0.0000	0.0003	0.0006	0.0006	0.0004	
21	SC Retail Sales kWh	Exhibit 2	1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
22	SC DERP Avoided Costs	Line 20 * Line 21 / 100	\$ 36	\$ 32	\$ 4,556	\$ 8,777	\$ 9,866	\$ 7,172	\$ 30,913
23	Residential DERP Avoided Costs Allocated by Firm CP	Line 22 * Line 1	\$ 14	\$ 16	\$ 2,335	\$ 4,499	\$ 5,056	\$ 3,676	\$ 15,780
24	SC Residential kWh Sales		628,501,539	657,177,943	610,321,704	480,884,048	414,875,999	447,612,785	6,796,116,987
25	SC Residential DERP Avoided Cost (¢/kWh)	Line 23 / Line 24 * 100	0.0000	0.0000	0.0004	0.0009	0.0012	0.0008	
26	SC Residential Rate Billed (¢/kWh)	Company Records	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	
27	SC DERP Avoided Cost (Over) / Under Recovery	(Line 25 - Line 26) * Line 24 / 100	\$ (3,757)	\$ (3,927)	\$ (1,327)	\$ 1,614	\$ 2,567	\$ 990	\$ 36,441
28	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 27 + PM Cum Bal	\$ 9,752	\$ 5,825	\$ 4,498	\$ 6,111	\$ 8,678	\$ 9,668	\$ 9,668

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - RESIDENTIAL  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.			Residential				Residential	
1		2017 Firm Coincident Peak CP %	38.68%		2018 Firm Coincident Peak CP %		51.25%	
			Estimated	Estimated	Estimated	Estimated	Estimated	
			June	July	August	September	4 months	
Line No.		Description	Reference	2019	2019	2019	2019	ended Sept 2018
29	Purchased Power Agreements		\$ 396	\$ 393	\$ 364	\$ 340	\$ 1,492	
30	Shared Solar Program		21,423	21,423	21,423	21,423	\$ 85,693	
31	Total DERP Avoided Costs	Line 29 + Line 30	\$ 21,819	\$ 21,816	\$ 21,787	\$ 21,763	\$ 87,185	
32	Total Projected System Sales kwhs (w/solar)	Exhibit 2	7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172	32,035,815,742	
33	DERP Avoided System Cost (¢/kWh)	Line 31 / Line 32* 100	0.0003	0.0003	0.0003	0.0003	0.0003	
34	Projected SC Retail Sales kWh	Exhibit 4, Page 1b of 3	1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150	7,865,967,286	
35	SC DERP Avoided Costs	Line 33 * Line 34 / 100	\$ 5,355	\$ 5,284	\$ 5,336	\$ 5,433	\$ 21,408	
36	Residential DERP Avoided Costs Allocated by Firm CP	Line 35 * Line 1	\$ 2,745	\$ 2,708	\$ 2,735	\$ 2,784	\$ 10,971	
37	SC Projected Residential kWh Sales	Exhibit 4, Page 1b of 3	486,895,816	619,213,465	687,169,454	628,981,205	2,422,259,939	
38	SC Residential DERP Avoided Cost (¢/kWh)	Line 36 / Line 37 * 100	0.0006	0.0004	0.0004	0.0004	0.0005	
39	SC Residential Rate Billed (¢/kWh)	Company Records	0.0006	0.0006	0.0006	0.0006	0.0006	
40	SC DERP Avoided Cost (Over) / Under Recovery	(Line 38 - Line 39) * Line 31/100	\$ (177)	\$ (1,007)	\$ (1,388)	\$ (990)	\$ (3,562)	
41	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 40 + PM Cum Bal	\$ 9,491	\$ 8,484	\$ 7,096	\$ 6,106	\$ 6,106	
42	SC Projected Residential Sales (October 2019-September 2020)	Exhibit 3						6,728,320,673
43	SC Residential DERP AC Increment / (Decrement) (¢/kWh)	Line 41 / Line 42* 100						0.0001

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - GENERAL SERVICE / LIGHTING  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.		General Service / Lighting		General Service / Lighting
1	2017 Firm Coincident Peak CP %	28.28%	2018 Firm Coincident Peak CP %	23.90%

  

Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018
2	Purchased Power Agreements		\$ 284	\$ 309	\$ 518	\$ 286	\$ 389	\$ 176
3	Shared Solar Program		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	<b>Total DERP Avoided Costs</b>	Line 2 + Line 3	\$ 284	\$ 309	\$ 518	\$ 286	\$ 389	\$ 176
5	Total System kWh Sales	Exhibit 2	7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955
6	DERP Avoided System Cost - (¢/kWh)	Line 4 / Line 5* 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	SC Retail Sales kWh	Exhibit 2	1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344
8	SC DERP Avoided Costs	Line 6 * Line 7 / 100	\$ 70	\$ 73	\$ 125	\$ 74	\$ 91	\$ 43
9	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 8 * Line 1	\$ 20	\$ 21	\$ 36	\$ 21	\$ 26	\$ 12
10	SC General Service/Lighting kWh Sales		532,609,815	555,007,748	534,768,585	608,217,191	471,984,556	426,666,805
11	SC General Service/Lighting DERP Avoided Cost (¢/kWh)	Line 9 / Line 10 * 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	SC General Service/Lighting Rate Billed (¢/kWh)	Company Records	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0001)	0.0005
13	SC DERP Avoided Cost (Over) / Under Recovery	( Line 11 - Line 12 ) * Line 10 / 100	\$ 2,683	\$ 2,796	\$ 2,710	\$ 3,062	\$ 486	\$ (2,100)
14	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	\$ (6,356)					
15	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 13 + PM Cum Bal	\$ (3,673)	\$ (878)	\$ 1,832	\$ 4,894	\$ 5,381	\$ 3,280

  

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
16	Purchased Power Agreements		\$ 149	\$ 133	\$ 18,720	\$ 36,552	\$ 23,863	\$ 3,960	\$ 85,341
	Shared Solar Program		\$ -	\$ -	\$ -	\$ -	\$ 15,982	\$ 24,918	\$ 40,901
	<b>Total DERP Avoided Costs</b>	Line 16 + Line 17	\$ 149	\$ 133	\$ 18,720	\$ 36,552	\$ 39,846	\$ 28,879	\$ 126,242
19	Total System kWh Sales	Exhibit 2	7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
20	DERP Avoided System Cost - (¢/kWh)	Line 18 / Line 19* 100	0.0000	0.0000	0.0003	0.0006	0.0006	0.0004	
21	SC Retail Sales kWh	Exhibit 2	1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
22	SC DERP Avoided Costs	Line 20 * Line 21 / 100	\$ 36	\$ 32	\$ 4,556	\$ 8,777	\$ 9,865	\$ 7,172	\$ 30,912
23	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 22 * Line 1	\$ 10	\$ 8	\$ 1,089	\$ 2,098	\$ 2,358	\$ 1,714	\$ 7,412
24	SC General Service/Lighting kWh Sales		445,252,198	455,887,041	446,297,147	406,630,406	413,949,578	461,349,327	5,758,620,397
25	SC General Service/Lighting DERP Avoided Cost (¢/kWh)	Line 23 / Line 24 * 100	0.0000	0.0000	0.0002	0.0005	0.0006	0.0004	
26	SC General Service/Lighting Rate Billed (¢/kWh)	Company Records	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	
27	SC DERP Avoided Cost (Over) / Under Recovery	(Line 25 - Line 26) * Line 24 / 100	\$ (2,216)	\$ (2,271)	\$ (1,142)	\$ 65	\$ 288	\$ (593)	\$ 3,767
28	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 27 + PM Cum Bal	\$ 1,064	\$ (1,207)	\$ (2,349)	\$ (2,284)	\$ (1,996)	\$ (2,589)	\$ (2,589)

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - GENERAL SERVICE / LIGHTING  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.		General Service / Lighting		General Service / Lighting			
1	2017 Firm Coincident Peak CP %	28.28%	2018 Firm Coincident Peak CP %	23.90%			
Line No.	Description	Reference	Estimated June 2019	Estimated July 2019	Estimated August 2019	Estimated September 2019	Estimated 4 months ended Sept 2018
29	Purchased Power Agreements		\$ 396	\$ 393	\$ 364	\$ 340	\$ 1,492
30	Shared Solar Program		\$ 21,423	\$ 21,423	\$ 21,423	\$ 21,423	\$ 85,693
31	<b>Total DERP Avoided Costs</b>	Line 29 + Line 30	\$ 21,819	\$ 21,816	\$ 21,787	\$ 21,763	\$ 87,185
32	Total Projected System Sales kwhs (w/solar)	Exhibit 4, Page 2b of 3	7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172	32,035,815,742
33	DERP Avoided System Cost (¢/kWh)	Line 31 / Line 32* 100	0.0003	0.0003	0.0003	0.0003	0.0003
34	Projected SC Retail Sales kWh	Exhibit 4, Page 2b of 3	1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150	7,865,967,286
35	SC DERP Avoided Costs	Line 33 * Line 34 / 100	\$ 5,355	\$ 5,284	\$ 5,336	\$ 5,433	\$ 21,408
36	General Service/Lighting DERP Avoided Costs Allocated by Firm CP	Line 35 * Line 1	\$ 1,280	\$ 1,263	\$ 1,275	\$ 1,298	\$ 5,117
37	SC General Service/Lighting kWh Sales		503,131,126	558,701,811	586,229,211	562,074,280	2,210,136,428
38	SC General Service/Lighting DERP Avoided Cost (¢/kWh)	Line 36 / Line 37 * 100	0.0003	0.0002	0.0002	0.0002	0.0002
39	SC General Service/Lighting Rate Billed (¢/kWh)	Company Records	0.0005	0.0005	0.0005	0.0005	0.0005
40	SC DERP Avoided Cost (Over) / Under Recovery	(Line 38 - Line 39) * Line 31/100	\$ (1,236)	\$ (1,531)	\$ (1,656)	\$ (1,512)	\$ (5,934)
41	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 40 + PM Cum Bal	\$ (3,824)	\$ (5,355)	\$ (7,011)	\$ (8,523)	\$ (8,523)
42	SC Projected General Service / Lighting Sales (October 2019 - September 2020)	Exhibit 3					5,986,473,078
43	SC General Service/Lighting DERP AC Increment / (Decrement) (¢/kWh)	Line 41 / Line 42* 100					(0.0001)

**DUKE ENERGY CAROLINAS, LLC**  
**SOUTH CAROLINA RETAIL FUEL CASE**  
**CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - INDUSTRIAL**  
**ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019**

Line No.		Industrial		Industrial
1	2017 Firm Coincident Peak CP %	33.03%	2018 Firm Coincident Peak CP %	24.85%

  

Line No.	Description	Reference	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018
2	Purchased Power Agreements		\$ 284	\$ 309	\$ 518	\$ 286	\$ 389	\$ 176
3	Shared Solar Program		-	-	-	-	-	-
4	<b>Total DERP Avoided Costs</b>	Line 2 + Line 3	\$ 284	\$ 309	\$ 518	\$ 286	\$ 389	\$ 176
5	Total System kWh Sales	Exhibit 2	7,999,801,237	8,477,178,071	8,257,882,938	9,497,758,228	6,334,828,962	6,670,820,955
6	DERP Avoided System Cost - (¢/kWh)	Line 4 / Line 5* 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7	SC Retail Sales kWh	Exhibit 2	1,960,743,382	1,991,741,085	2,009,609,778	2,449,765,120	1,479,486,530	1,634,436,344
8	SC DERP Avoided Costs	Line 6 * Line 7 / 100	\$ 70	\$ 73	\$ 125	\$ 74	\$ 91	\$ 43
9	Industrial DERP Avoided Costs Allocated by Firm CP	Line 8 * Line 1	\$ 23	\$ 24	\$ 42	\$ 24	\$ 30	\$ 14
10	SC Industrial kWh Sales		818,919,911	751,671,822	836,295,956	1,144,811,435	515,774,529	772,310,917
11	SC Industrial DERP Avoided Cost (¢/kWh)	Line 9 / Line 10 * 100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	SC Industrial Rate Billed (¢/kWh)	Company Records	0.0001	0.0001	0.0001	0.0001	0.0002	0.0004
13	SC DERP Avoided Cost (Over) / Under Recovery	( Line 11 - Line 12 ) * Line 10 / 100	\$ (796)	\$ (728)	\$ (794)	\$ (1,121)	\$ (1,109)	\$ (3,064)
14	(Over) / Under Cumulative Balance May 2018	Prior Year Annual Filing	\$ 8,828					
15	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 13 + PM Cum Bal	\$ 8,032	\$ 7,305	\$ 6,510	\$ 5,390	\$ 4,281	\$ 1,216

  

Line No.	Description	Reference	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	Twelve Months Ended May 2018
16	Purchased Power Agreements		\$ 149	\$ 133	\$ 18,720	\$ 36,552	\$ 23,863	\$ 3,960	\$ 85,341
17	Shared Solar Program		\$ -	\$ -	\$ -	\$ -	\$ 15,982	\$ 24,918	\$ 40,901
18	<b>Total DERP Avoided Costs</b>	Line 16 + Line 17	\$ 149	\$ 133	\$ 18,720	\$ 36,552	\$ 39,846	\$ 28,879	\$ 126,242
19	Total System kWh Sales	Exhibit 2	7,490,426,895	7,560,242,873	7,420,082,024	6,511,025,145	6,356,600,998	6,715,599,810	89,292,248,136
20	DERP Avoided System Cost - (¢/kWh)	Line 18 / Line 19* 100	0.0000	0.0000	0.0003	0.0006	0.0006	0.0004	
21	SC Retail Sales kWh	Exhibit 2	1,797,159,761	1,793,547,356	1,805,776,337	1,563,564,949	1,573,895,668	1,667,964,212	21,727,690,522
22	SC DERP Avoided Costs	Line 20 * Line 21 / 100	\$ 36	\$ 32	\$ 4,556	\$ 8,777	\$ 9,866	\$ 7,172	\$ 30,913
23	Industrial DERP Avoided Costs Allocated by Firm CP	Line 22 * Line 1	\$ 12	\$ 8	\$ 1,132	\$ 2,181	\$ 2,452	\$ 1,782	\$ 7,724
24	SC Industrial kWh Sales		723,406,024	680,482,372	749,157,486	676,050,495	745,070,091	759,002,100	9,172,953,138
25	SC Industrial DERP Avoided Cost (¢/kWh)	Line 23 / Line 24 * 100	0.0000	0.0000	0.0002	0.0003	0.0003	0.0002	
26	SC Industrial Rate Billed (¢/kWh)	Company Records	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	
27	SC DERP Avoided Cost (Over) / Under Recovery	(Line 25 - Line 26) * Line 24 / 100	\$ (2,882)	\$ (2,714)	\$ (1,865)	\$ (523)	\$ (528)	\$ (1,254)	\$ (17,378)
28	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 27 + PM Cum Bal	\$ (1,666)	\$ (4,380)	\$ (6,244)	\$ (6,767)	\$ (7,295)	\$ (8,549)	\$ (8,549)

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF DERP AVOIDED COST (OVER) / UNDER RECOVERY - INDUSTRIAL  
ACTUAL AND ESTIMATED COSTS AND REVENUES JUNE 2018 - SEPTEMBER 2019

Line No.		Industrial					Industrial
1	2017 Firm Coincident Peak CP %	33.03%				2018 Firm Coincident Peak CP %	24.85%
Line No.	Description	Reference	Estimated June 2019	Estimated July 2019	Estimated August 2019	Estimated September 2019	Estimated 4 months ended Sept 2018
29	Purchased Power Agreements		\$ 396	\$ 393	\$ 364	\$ 340	\$ 1,492
30	Shared Solar Program		21,423	21,423	21,423	21,423	85,693
31	<b>Total DERP Avoided Costs</b>	Line 29 + Line 30	\$ 21,819	\$ 21,816	\$ 21,787	\$ 21,763	\$ 87,185
32	Total System kWh Sales	Exhibit 4, Page 3b of 3	7,097,791,674	8,128,668,264	8,680,327,632	8,129,028,172	32,035,815,742
33	DERP Avoided System Cost - (¢/kWh)	Line 31 / Line 32* 100	0.0003	0.0003	0.0003	0.0003	0.0003
34	SC Retail Sales kWh	Exhibit 4, Page 3b of 3	1,742,100,557	1,968,812,531	2,125,817,048	2,029,237,150	7,865,967,286
35	SC DERP Avoided Costs	Line 33 * Line 34 / 100	\$ 5,355	\$ 5,284	\$ 5,336	\$ 5,433	\$ 21,408
36	Industrial DERP Avoided Costs Allocated by Firm CP	Line 35 * Line 1	\$ 1,331	\$ 1,313	\$ 1,326	\$ 1,350	\$ 5,320
37	SC Industrial kWh Sales		752,073,616	790,897,255	852,418,383	838,181,666	3,233,570,919
38	SC Industrial DERP Avoided Cost (¢/kWh)	Line 36 / Line 37 * 100	0.0002	0.0002	0.0002	0.0002	0.0002
39	SC Industrial Rate Billed (¢/kWh)	Company Records	0.0004	0.0004	0.0004	0.0004	0.0004
40	SC DERP Avoided Cost (Over) / Under Recovery	(Line 38 - Line 39) * Line 31/100	\$ (1,678)	\$ (1,851)	\$ (2,084)	\$ (2,003)	\$ (7,615)
41	Cumulative SC DERP Avoided Cost (Over) / Under Recovery	Line 40 + PM Cum Bal	\$ (10,227)	\$ (12,077)	\$ (14,161)	\$ (16,164)	\$ (16,164)
42	SC Projected Industrial Sales (October 2019 - September 2020)	Exhibit 3					9,171,268,692
43	SC Industrial DERP AC Increment / (Decrement) (¢/kWh)	Line 41 / Line 42* 100					(0.0002)

DUKE ENERGY CAROLINAS, LLC  
SOUTH CAROLINA RETAIL FUEL CASE  
CALCULATION OF PROJECTED BILLING PERIOD DERP AVOIDED COST BILLING FACTORS  
FOR THE 12 MONTHS OCTOBER 2019 TO SEPTEMBER 2020

Line No.	Class	2018 Firm Coincident Peak (CP) KWs	CP %
1	Residential	2,055,870	51.25%
2	General Service / Lighting	958,783	23.90%
3	Industrial	996,792	24.85%
	Total SC	4,011,445	100%

Line No.	Description	Reference	October 2019	November 2019	December 2019	January 2020	February 2020	March 2020
4	Purchased Power Agreements		\$ 311	\$ 266	\$ 66,881	\$ 90,812	\$ 98,399	\$ 139,451
5	Shared Solar Program		21,352	21,352	21,352	21,352	21,352	21,352
6	<b>Total DERP Avoided Costs</b>	Line 4 + Line 5	\$ 21,663	\$ 21,618	\$ 88,233	\$ 112,164	\$ 119,751	\$ 160,803
7	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,803,214,198	6,495,662,262	7,186,884,482	7,903,467,722	7,808,874,524	7,353,013,933
8	DERP Avoided System Cost - (¢/kWh)	Line 6 / Line 7 * 100	0.0003	0.0003	0.0012	0.0014	0.0015	0.0022
9	Projected SC Retail Sales kWh	Exhibit 3	1,706,250,685	1,621,069,330	1,752,297,794	1,903,104,027	1,905,467,334	1,823,372,113
10	SC DERP Avoided Costs	Line 8 * Line 9 /100	\$ 5,433	\$ 5,395	\$ 21,513	\$ 27,008	\$ 29,221	\$ 39,875

Line No.	Description	Reference	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020	12 Month Total
11	Purchased Power Agreements		\$ 98,488	\$ 98,507	\$ 98,509	\$ 119,567	\$ 119,538	\$ 154,858	\$ 1,085,587
12	Shared Solar Program		21,352	21,352	21,352	21,352	21,352	21,352	256,222
13	<b>Total DERP Avoided Costs</b>	Line 11 + Line 12	\$ 119,840	\$ 119,859	\$ 119,861	\$ 140,918	\$ 140,889	\$ 176,209	\$ 1,341,809
14	Total Projected System Sales kwhs (w/solar)	Exhibit 3	6,672,124,994	6,463,555,894	7,048,447,873	8,241,762,239	8,635,074,609	8,178,560,496	88,790,643,227
15	DERP Avoided System Cost - (¢/kWh)	Line 13 / Line 14 *100	0.0018	0.0019	0.0017	0.0017	0.0016	0.0022	
16	Projected SC Retail Sales kWh	Exhibit 3	1,687,895,589	1,621,681,377	1,726,646,416	1,990,627,190	2,110,577,812	2,037,072,774	21,886,062,443
17	SC DERP Avoided Costs	Line 15 * Line 16 /100	\$ 30,317	\$ 30,072	\$ 29,362	\$ 34,036	\$ 34,436	\$ 43,889	\$ 330,558
<b>SC DERP Avoided Cost Allocated on Firm CP kW's</b>									
18	Residential	Total Line 17 * Line 1							\$ 169,411
19	General Service / Lighting	Total Line 17 * Line 2							\$ 79,007
20	Industrial	Total Line 17 * Line 3							\$ 82,139
21	Total SC	Sum Lines 18 through 20							\$ 330,558
<b>Projected SC Retail Sales kWh (October 2019 - September 2020)</b>									
22	Residential	Exhibit 3							6,728,320,673
23	General Service / Lighting	Exhibit 3							5,986,473,078
24	Industrial	Exhibit 3							9,171,268,692
25	Total SC	Sum Lines 22 through 24							21,886,062,443
<b>SC DERP Avoided Cost ¢/kWh</b>									
26	Residential	Line 18 / Line 22 * 100							0.0025
27	General Service / Lighting	Line 19 / Line 23 * 100							0.0013
28	Industrial	Line 20 / Line 24 * 100							0.0009